IN THE CIRCUIT COURT OF OHIO COUNTY, WEST VIRGINIA

IN RE: TOBACCO LITIGATION — CIVIL ACTION NO. 00-C-6000
(MEDICAL MONITORING CASES) (Judge Arthur M. Recht)
Judge Tod J. Kaufman)

Deposition of:

WILLIAM SCHAFFNER, MD

Taken on behalf of the Plaintiffs

August 28, 2000

A. WILLIAM ROBERTS, JR. & ASSOCIATES

APPEARANCES:

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I N D E X

EXHIBITS

S T I P U L A T I O N

The deposition of WILLIAM SCHAFFNER,

MD, was taken by counsel for the Plaintiffs at the Vanderbilt Medical Center North, B-1124, Nashville, Tennessee, beginning at 1:00 p.m. on August 28, 2000, for all purposes under the West Virginia Rules of Civil Procedure.

The formalities as to notice, caption, and reading and signing of the deposition are waived. All objections, except as to the form of the questions, are reserved to the hearing.

It is agreed that Nancy Satoloe, being a Notary Public and Court Reporter for the State of Tennessee, may swear the witness, and that the reading and signing of the completed deposition by the witness are not waived.

* * *

WILLIAM SCHAFFNER, MD

was called as a witness, and after having been first duly sworn, testified as follows:

EXAMINATION

BY MR. JEKEL:

Q. Good afternoon, Dr. Schaffner. My name is -- is it Schaffner?

A. Yes.

Q. You'll have to speak up so that the folks on the other end of the line can hear us. I'm sure they'll let us know if they don't hear you.

My name is Fritz Jekel. I'm one of the attorneys representing the plaintiffs in this action. Have you had your deposition taken before?

A. I have.

Q. All right. You know the ground rules. It will be important for you to allow me to finish my question before you give an answer. Also allow the folks participating on the telephone an opportunity to let us know if they can't hear and for counsel to raise an objection.

If you answer a question, I will

assume you understood it. If at any time you need more information in which to answer my question, let me know and I'll do my best to make it answerable.

If you need a break at any time, let me know and we'll go from there.

Dr. Schaffner, do you have a file in this matter?

A. Yes.

Q. Did you bring it with you?

A. I did.

Q. Can I take a look at it?

For the benefit of the folks participating by phone, I'm just going to identify the materials that are in the doctor's file.

The first item is his Expert Witness Disclosure. The second item is the Third Amended Complaint in the Blankenship matter. The next item is the Revised Report of David Burns; it has some highlighting and some tabs. The third -- would you identify -- or fourth item, sorry, would you identify this for the record?

A. This is a report of Dr. Donald B. Luria.

Q. Okay. All right. The next item is

from the May, 1998 Scientific News Front article. Is that the name of the publication?

The West Virginia Medical Journal, I'm sorry, May 1988, Volume 84, page 177, "The Declining Incidence and Changing Epidemiological Pattern of Tuberculosis."

The next item in the report is a -- can you give us the source for that, Dr. Schaffner?

A. These are a series of tables which we got from the CDC, Centers for Disease Control and Prevention website. The tables are entitled "Tuberculosis Cases" and "Case Rates Per 100,000 Population by State," and then I have them for the years 1996 through 1999.

Q. All right. The next item is an article from the Lancet, Volume 354, July 10th, 1999 entitled "Early Lung Cancer Action Project: Overall Design and Findings from Baseline Screening."

The next item is an editorial from the Journal of the National Cancer Institute, Volume 92, No. 16, August 16th, 2000 entitled "Overdiagnosis: An Underrecognized Cause of Confusion and Harm in Cancer Screening."

The next item is also from the Journal of the National Cancer Institute, Volume 92, No. 16, August 16th, 2000 entitled "Lung Cancer Mortality in the Mayo Lung Project: Impact and Extended Followup."

The next item is also, I guess, from the Journal of the National Cancer Institute. It looks to be an article entitled "Lung Project Update Raises Issue of Overdiagnosing Patients" by a Laura Newman.

Excuse me.

The next article -- is this from the CDC?

A. This is an article from the journal Clinical Infectious Diseases.

Q. Okay. It's entitled "Histoplasmosis and Blastomycosis." Did I pronounce that properly? By a Bradsure.

This next article is from the Seminars in Respiratory Infections, Volume 5, No. 2, June, 1990 entitled "Histoplasmosis: Update

1989."
Is BMJ the British Medical Journal?
A. Yes.
Q. The next article is from the British

Medical Journal, Volume 321, August 5th, 2000 entitled "Smoking, Smoking Cessation, and Lung Cancer in the UK since 1950: Combination of National Statistics with Two Case Control Studies" by Peto, P-e-t-o, et al.
The next article is from the American Review of Respiratory Disease, Volume 105 from 1972 entitled "A Combined Field and Laboratory Epidemic of Histoplasmosis Isolation from Bat Feces in West Virginia."
Do you know what journal this is from, Doctor?
A. I can't say for sure.
Q. Okay. It's an article entitled "Early Lung Cancer Action Project: Overall Design of Baseline Screening" by Henschke, H-e-n-s-c-h-k-e, Claudia I., it's dated -- I don't know if it has a date in here.
The next item is from the First International Conference on Screening for Lung Cancer, October 1st through 3rd, 1989. It sends a statement.
The next item is from Chest, June, 2000 article entitled "Correlation of Tumor Size and Survival in Patients with Stage 1A Non-Small

Cell Lung Cancer" by Patts, et al.
The next document is, I guess, from the National Cancer Institute, is that what this is called, the PDQ, Supportive Care? This is just a statement from the NCI on screening for lung cancer?
A. Looks that way to me.
Q. All right. Printed off the Internet, 4-27-2000.
The next document is by -- this is a bit tedious, Doctor, but it will save us some time. It's an article by Dr. Strauss, S-t-r-a-u-s-s, "Lung Cancer Screening in Randomized Population Trials."
The next article is by Miettinen, M-i-e-t-t-i-n-e-n, "Screening for Lung Cancer: Do We Need Randomized Trials?"
The next article is by Diederich, D-i-e-d-e-r-i-c-h, and Lenzen, L-e-n-z-e-n, entitled "Radiation Exposure Associated with Imaging of the Chest: Comparison of Different Radiographic and CT Techniques."
We also have the expert report of Alfred B. Watson. We have a copy, the next item is a copy of the proceedings on the Second

National Conference on Histoplasmosis from 1971; is that correct?
A. Yes.

Q. Appears to be a book by Charles C. Thomas, Publisher?
A. And it's Chapter 15 in that book by Ajello, A-j-e-l-l-o, "Distribution of Histoplasmacapsulatum in the United States."
Q. Thank you, sir.
The next article appears from the European Respiratory Journal, 1996, entitled "Clinical Spectrum of Pulmonary and Pleural Tuberculosis, a Report of 5,480 Cases" by Aktogu, A-k-t-o-g-u, et al.
The next article is from the Journal of Thoracic Imaging, Volume 7, Issue 4, 1992 entitled "Clinical Manifestations of Pulmonary Fungal Infections."
Chapter 36, do you know, is that the only chapter?
A. Yes.
Q. The next document is Volume 1, Textbook of Respiratory Medicine, Second Edition by Dr. Muray and Nadell, that's M-u-r-a-y, Chapter 36, "Fungal Infections" by Drs. Davies and Sarosi,

S-a-r-o-s-i.
The next article is from, I guess, it's Surgery Today entitled "Pulmonary Histoplasmosis in Japanese Male: Report of a Case." It's from 1998.
We have another chapter from the Textbook of Respiratory Medicine, Second Edition. This happens to be Chapter 35, "Tuberculosis and Other Mycobacterial Diseases" by Hopewell and Bloom.
The next document, Acta Radiological, a Denmark publication entitled "Imaging of Tuberculosis-Experience from 503 Patients" by a Nyman, N-y-m-a-n, et al., 1996.
The next article -- I don't know where it's from, but it's entitled "Pulmonary Infections Mimicking Cancer: A Retrospective, Three-year Review" by Dr. Rolston, R-o-l-s-t-o-n, et al.
If, you know, if we had a list of these publications, it might move things along.
But the next one is from the Journal of Thoracic Imaging, 1992 entitled "Thoracic Histoplasmosis" by Drs. Rubin, et al.
The next article is from -- let's see

where it's from. The International Journal of Tuberculosis and Lung Disease, 1998, "Pulmonary Tuberculosis in the Adult in Low Prevalence Area: Is the Radiologic Presentation Changing" by Dr. Brande, B-r-a-n-d-e. I think it's actually Van den Brande. V-a-n space small d-e-n.
The next item is Textbook of Pulmonary Diseases, Fifth Edition, Volume 1, edited by Dr. Baum, B-a-u-m, and Wallinski, Chapter 21 on Tuberculosis by Wallinski, 1994.
The next article is entitled "Update: The Radiographic Features of Pulmonary

Tuberculosis," March, 1996 in the AJR by Woodring, W-o-o-d-r-i-n-g.

And the last in the stack, Diagnosis of Diseases of the Chest, Fourth Edition, Volume 2 by Fraser, F-r-a-s-e-r, Chapter 27 on Mycobacteria. Do you know if that's the only chapter in there?

A. I think that's the only chapter.

Q. All right. Does this comprise your entire file in this matter?

A. Yes.

Q. Is this the entirety of the materials you will be relying on for your expected testimony

in this action?

A. Well, in addition to this, I'll be relying on my background and experience and my general knowledge of the medical literature.

Q. Any other textbooks or articles that spring to mind that you would expect to testify at trial about?

A. Not at the moment.

Q. Okay. Did you compile these materials yourself, Dr. Schaffner?

A. The materials in there that came from me are the tuberculosis tables.

Q. Okay.

A. And the chapter by Dr. Ajello on Histoplasmosis.

Q. All right. Why don't we take those out. There's the tuberculosis statements.

The other materials that are in this considerable stack, they were provided to you from where?

A. Mr. O'Tuel provided those.

Q. So the lawyers for RJR provided you the rest of your reliance materials; is that correct?

MR. LATHAM: Object to the form of

the question.

THE WITNESS: No. They just provided the rest of the materials in this list.

BY MR. JEKEL:

Q. Did you compile a list and provide it to counsel for RJR and say, can you obtain copies of these articles for me to rely upon, or did the counsel for RJR come to you and say, Dr. Schaffner, here is a list of materials we would like for you to rely on for your testimony, or something else?

A. Well, it was nothing quite like that. I know we had conversations, and I said, I'm going to provide some materials. If you think you have something -- my comments to them -- that you think I might -- that are in your files that would save me time, and I think this was the product of that.

Q. All right. Have you read all of the articles in this stack?

A. Not from first word to last, but I've looked at them all.

Q. Okay. Are there some in here that you've looked at that you do not anticipate relying on and that we cannot discuss today?
A. Well, I'm not entirely sure what you mean by that.
Q. Well, are there any materials in here for which you do not anticipate relying for the basis of your expected opinions at trial? After you reviewed it all, did you say, you know, I don't need this? Anything like that?
A. Well, I didn't say that, so I haven't thought about it in that kind of a selective way.
Q. All right. Well, thinking about it now, are there any articles or texts or anything in this stack that we just went through that as you sit here today you think to yourself, I'm not going to need this for my trial testimony, I will not rely on it?
A. Well, actually, my reliance comes from a vastly larger base than this because it's my whole experience and my general knowledge of the literature. I haven't thought of this as a special collection of materials that I will only go to, so I haven't given it that kind of thought.
Q. Do you know why counsel for RJR provided you some of these articles? Did they tell you what the purpose in that was?
A. Oh, I mean, clearly, I'm an infectious diseases person, and that's where I

expect most of my comments to be, and we had had some discussions about my thoughts in that area, and I think they responded to that. For example, these textbook chapters on Histoplasmosis and Tuberculosis, I talked about those illnesses, and I think they were just trying to be helpful. I mean, there are lots of other textbooks and other parts of the medical literature that relate to histoplasmosis and tuberculosis that are available and that I have seen and used in the past.
Q. The textbook of Respiratory Medicine, is this a textbook that you use here at the college?
A. I'm not entirely sure what you mean by that. It may well be in the library and may be in the personal libraries of many people here. I don't know that for a fact.
Q. As I understand it, you do teach some medical students here?
A. Oh, yes.
Q. Do you teach them in respiratory medicine?
A. Is that "you" large or "you" personally?
Q. You personally.

A. Of course, but I'm not a pulmonologist, and that's a text that's written by pulmonologists, but for sure infectious diseases

involve the respiratory tract, and we teach that.
Q. Is this a textbook that you use in any of the courses that you, Dr. Schaffner, teach here at the medical college?
A. We don't assign texts to courses in the way that it's done in undergraduate school. The medical library is available to the medical students. I have gone into that text from time to time in the past. I'm familiar with the text generally. I know that it exists.
Q. Fine. Have you ever referred to this chapter in your teachings here at the college, the section on Fungal Infections?
A. I can't recall that I have.
Q. Do you know what in here, in this chapter you will rely upon for your opinions in this matter?
A. Well, it's a difficult question for me to answer. I don't know that there's anything that I could point out, a sentence or paragraph, et cetera, or section that relates specifically to my anticipated testimony, although --

Q. Okay. I'm sorry.
A. Although I'm trying to be responsive to your comments. This is a general chapter on Fungal Infections by Scott Davies and George Sarosi. The area that I have talked with the attorneys about and is reflected in other articles in this stack is histoplasmosis, so I dare say that would be the area that would receive most of my attention.
Q. So if there's anything in that chapter on histoplasmosis, that's what you might use this for. Other than that, -- when was the last time you looked at this chapter?
A. It was either Saturday night or last night.
Q. Did you review the whole thing?
A. I looked through it. I looked through all of this material.
Q. Do you know if this chapter mentions the word lung cancer?
A. No. I don't know that.
Q. Dr. Schaffner, when were you first retained to provide expert services in the Blankenship matter?
A. Fairly recently, sometime in the last

several months. I couldn't tell you more specifically than that.
Q. Was it beginning of the summer, let's say, April? Or the end of April? Was it after tax day, do you know?
A. I don't know.
Q. Is there anything in your file or your desk book or your calendar that might reflect the exact date upon which you were retained to provide services in this matter?
A. No.
Q. Have you rendered a bill to whoever

has retained you for your services in this matter to date?
A. No.
Q. Do you anticipate issuing a bill for your services to date?
A. I anticipate submitting a bill for services rendered. It may not be just this date; this may continue.
Q. Yes. I assume that would include time preparing your expert disclosure?
A. Yes.
Q. Your time talking with the attorneys about your areas of expertise?

A. Correct.
Q. Your time reviewing the stack of materials and other reliance materials?
A. Correct.
Q. Okay. Who retained you in this matter?
Who is your client?
A. Mr. O'Tuel's firm.
Q. I'd like to discuss the manner in which you were retained. Was it a telephone conversation?
MR. LATHAM: Object to the form of the question. What do you mean by manner in which you were retained?
BY MR. JEKEL:
Q. Let's talk about the first contact from the counsel for RJR. I'm assuming they made contact with you, Dr. Schaffner, and said, Dr. Schaffner, we're counsel for RJR. We'd like to retain your services or we'd like to discuss with you the possibilities of retaining your services. Did anything like that ever take place?
A. I'm sure something like that took place.
Q. Do you remember the first contact you

had with Mr. O'Tuel or anyone from Mr. O'Tuel's firm?
A. Not with specificity.
Q. Do you know if it was a meeting in person or on the telephone or something else? Over the computer?
A. It was not over the computer.
Q. Okay. Do you recall him coming to you in person?
A. It may have been while we were together or it may have been on the phone.
Q. When were you together?
A. I'm sorry?
Q. Let me back up.
Prior to your involvement in the Blankenship matter, had you been retained by Mr. O'Tuel's firm in the past to provide expert services/testimony in tobacco-related litigation?
A. Yes.
Q. How long ago was that?
Or when was the first time you

provided services to Mr. O'Tuel's firm in tobacco-related litigation?
A. I won't be able to tell you that specifically, but order of magnitude to the best

of my memory at this moment, let's say a couple of years.
Q. Okay. Fair enough.
Have you issued bills to Mr. O'Tuel's firm for any of the work you've done in any tobacco-related litigation?
A. Yes.
Q. Do you maintain those files on your computer?
A. No.
Q. Do you maintain hard copies of those invoices?
A. I think once they're paid, I discard most of them. I have very -- not very regular files for my night job.
Q. The fees that you generate and make from the tobacco-related litigation, do those go to a personal business that you have, or do they go to the University? What happens with those fees?
A. The University permits us to do this sort of consultation, and we are permitted to retain the fees that we charge.
Q. Since you have been consulting with Mr. O'Tuel's firm, do you know if Mr. O'Tuel's

firm has always been representing RJR?
A. I don't know the answer to that.
Q. Did you know as it relates to your work in the Blankenship case that Mr. O'Tuel's firm was representing RJR?
A. I knew that they were representing a firm in the tobacco industry, but -- they may have told me, but I did not take notice of the specific firm.
Q. Do you delineate on your income tax return the fees that you generate from your tobacco litigation expertise or the work you do in the tobacco litigation?
A. Delineate from or how?
Q. Do you include it on your personal income taxes?
A. Well, I include on my personal income taxes all my income, you bet.
Q. All right. Does Mr. O'Tuel's firm send you some kind of form so you can report accurately the amount of money you've made?
A. I can't answer that specifically, but that might well be.
Q. Can you give me an estimate of the total amount of fees you've generated as a result

of your work in the tobacco litigation?
A. Not as I sit here.
Q. How much do you charge an hour,

Doctor?
A. $550.
Q. Is that for generation of the expert report?
A. It's for everything.
Q. Everything. Review of these materials?
A. That's what the word means, everything.
Q. I just want to make sure.
Can you give me an estimate of how many hours you've put into this case here today?
A. It would be an estimate.
Q. That's fine.
A. Let's say 10, 11.
Q. Would it be fair to say, Dr. Schaffner, that over the last two years in the tobacco-related litigation that you have made over $100,000 in expert witness fees?
A. Heck no.
Q. No? Would it be more than $50,000?
A. No.

Q. Do you have a figure in mind?
A. No. But it's a lot less than $50,000. A lot less.
Q. All right. How do you keep your hours for your work in this matter?
A. I just jot them down.
Q. And who generates the invoice?
A. My secretary/administrative assistant.
Q. And how have you demarked the Blankenship file, if you will?
Do you have a file name or number?
A. What do you mean by demarked?
Q. Well, just how you keep track of it, like when you are writing down your hours as they relate to the Blankenship work, do you write down Blankenship, or have you assigned a file number, whatever that file number or name may be for your work in this matter?
A. I believe it's -- I may have just called it Medical Monitoring.
Q. Okay. That's fair enough.
A. I don't know whether it's fair, but it's accurate, or to the best of my ability.
Q. Do you know in how many other cases

you have provided expert services to Mr. O'Tuel's firm?
A. I believe two.
Q. Do you recall the names of those actions?
A. Well, I remember that the plaintiff for both had the same name, and the name is Neri, N-e-r-i, and that was also an infectious disease-related issue.
Q. Other than Mr. O'Tuel's firm, have you been retained by other law firms to provide expert services in tobacco-related litigation?

A. I have not.
Q. Did you give testimony, deposition and/or trial testimony in the Neri case?
A. I think not.
Q. Okay. Do you know if you issued an expert witness disclosure in that action?
A. I couldn't tell you as I sit here.
Q. If you did, would you have those files on your computer in your office?
A. You credit me with more computer expertise than I have. I don't know whether they have been retained there in the office or not, and I don't even know if they are there.

Q. Okay. How about the expert witness disclosure in this action? Did you or someone on your staff type this up for you?
A. I don't think so.
Q. Did you write it out, send it to someone, ask them to type it up for you and review it?
A. Well, variants of that are often the case when I do this. I think, I think this one resulted from a discussion between me and Mr. O'Tuel.
Q. Okay. Would that have been in person, on the phone, over the computer, or do you not recall?
A. I best say I don't recall. I think it was on the phone, but I wouldn't want to be held to that.
Q. Okay. If --
A. That may not be right. I can't tell you.
Q. Would you have made an entry on a slip of paper, half-hour discussion with Mr. O'Tuel, witness disclosure form or something similar to that?
A. It would have been less -- it could

have been that specific or it might just have been consultation with Mr. O'Tuel.
Q. Do you know if you've ever made an entry for purposes of billing Mr. O'Tuel's firm for drafting your expert witness disclosure form?
A. Excuse me. Tell me the question again. Have I --
Q. Ever made an entry for purposes of billing Mr. O'Tuel's firm for your services in this action for drafting an expert witness disclosure?
A. I don't know if it's noted that specifically, but I suspect I have made an entry.
Q. Do you know how much time you put in drafting this expert witness disclosure?
A. I don't recall that at the moment. I mean, we had substantial discussion before that, and it may not have been even on that exact moment, you know, I have had several contacts with Mr. O'Tuel and Miss Crooks about this.
Q. I'm sorry. The other person you

mentioned was a Miss --
A. Susan Crooks.
Q. Is she also an attorney with Mr. O'Tuel?

A. Indeed.
Q. Since you've been retained in this matter, can you identify for me at least the number of phone conversations or face-to-face meetings you have had with representatives from Mr. O'Tuel's firm discussing your testimony in the Blankenship case?
A. Not off the top of my head, but I could get that for you.
Q. And where would you get that information?
A. From my office, I think, or it's either there or at home.
Q. Okay. We won't make you do that right now. It may be something we request later on.
The information though from where you would get that though, would that be in your billing notes or the entries that you make and how much time you spend on the case?
A. Yes.
Q. Isn't it true that Mr. O'Tuel or someone at Mr. O'Tuel's firm drafted this Expert Witness Disclosure and sent it to you and asked you if you would approve it?

A. That was the culmination of the process, yes.
Q. Did you see any drafts of this document that you marked up, had questions about or revisions to?
A. They blur together. I can't remember specifically.
Q. Can you in looking at the expert report, can you tell me certain areas in which you may have made changes to or sentences that you said, we need to change this?
A. I could not be that specific today.
Q. Okay. Is it your recollection that there were, in fact, prior drafts to this report for which you made changes?
A. Is that my recollection, is that your question?
Q. Yes.
A. That's not my recollection. My recollection is not sufficiently specific as to the generation of this specific document.
Q. So it may have been that this was the first draft, you looked at it, said it's fine, I'll go with it?
A. That's possible.

Q. But this was not generated off of your computer, was it?
A. No. It was not.

Q. This came from counsel for RJR, did it not?
A. Yes.
Q. And the footer on the bottom there, the Raleigh footer, do you know what any of that means?
A. I suspect -- this is sworn testimony, and we're hard up against my knowledge of computers, but I think that that will let someone whose computer it is get to that document.
Q. But that's not on your computer?
A. No. It's not.
Q. And you really don't know what that number means except that it's something that Mr. O'Tuel's firm put on the bottom of your expert report, isn't it?
A. I dare say.
MR. JEKEL: I want to mark this as an exhibit, but I don't know if you want me to mark his copy from his file or if we want to make copies of it after the deposition is done. Do you gentlemen have a preference? Does Dr. Schaffner

have a preference?
MR. LATHAM: Up to you.
THE WITNESS: Doesn't make any difference. I'd like to just retain a copy of that. It doesn't have to be those two pieces of paper.
MR. JEKEL: Let's go ahead and mark Dr. Schaffner's report as Schaffner Exhibit 1.
(Whereupon, the above-mentioned report document was marked Exhibit No. 1.)
BY MR. JEKEL:
Q. Before we go over your report, Dr. Schaffner, I'd like to ask you if at any time consulting with Mr. O'Tuel's firm, did you ever ask them why they came to you or how they got your name or why they sought you out as an expert in this area?
A. My memory of that is that they were working with a colleague, and he referred them to me.
Q. Do you know who that colleague would be?
A. And if you give me a little time, I'll try to think of his name.
Q. Certainly.

A. Which won't be momentarily. I have a name problem. He's no longer with the University.
Q. Do you know what his expertise was or was he with preventive medicine or --
A. He -- his area of expertise is pulmonary medicine.
Q. Okay.
And did you know why your colleague, your former colleague here at the medical center gave them your name? Did he have a specific reason why he recommended you, Dr. Schaffner, to talk with Mr. O'Tuel's firm?

A. My memory is a bit dim on that, but I think it was because they had an infectious disease question in mind.
Q. Other than the work that you have done for Mr. O'Tuel's firm in the tobacco litigation, have you provided expert testimony in nontobacco litigation?
A. Yes.
Q. On how many occasions have you been retained to provide expert testimony in nontobacco-related litigation?
A. I couldn't give you a number. It's -- I'd call it kind of my night job.

Q. How long have you held this night job, if you will?
A. I must have begun, oh, 15 years ago, or thereabouts.
Q. Do you maintain a list anywhere of the actions for which you've provided expert testimony in the past?
A. I've tried to provide a list for those at your request, I think, of those instances in which I have either been deposed or given testimony. I've already told you about the somewhat casual nighttime filing system. The finances are reported rigorously to the Internal Revenue Service, but then the rest of that material, I don't need to keep, so this is the list that actually, I think I provided first to Mr. O'Tuel, and he's -- I must have had part of it handwritten or something, he's reformatted it, so it looks better than the list I gave him. And that's back since -- I don't know how far back it goes.
Q. I don't know either.
A. '92, if memory serves.
Q. Okay. We'll go ahead and mark what's entitled William Schaffner, MD testimony, it's a

3-page document with 34 entries on it, as Schaffner Exhibit 2.
(Whereupon, the above-mentioned document was marked Exhibit No. 2.)
BY MR. JEKEL:
Q. I'm going to hand you Exhibit No. 2, and if you can, Dr. Schaffner, can you tell me by number if your testimony involved any questions concerning cancer, be it lung cancer or some other cancer?
A. I don't believe cancer was ever involved in these cases.
Q. Okay. In the Neri cases -- by the way, is Neri listed on there?
A. Neri is not on here, so I guess I haven't provided deposition testimony in that case or my files didn't show it.
Q. Do you gentlemen know whether he did give a deposition in those actions, Neri?
MR. LATHAM: I have no idea
MR. JEKEL: You don't know, Mr.

O'Tuel?
MR. O'TUEL: He did not.
BY MR. JEKEL:
Q. But it's your recollection none of

these actions involved a question of lung cancer?
A. I don't believe lung cancer, and to my best memory, cancer of any kind played a role in any of these cases. I'm an infectious diseases doctor. These involve by and large issues of infection.
Q. Can you identify just by number those cases that may have involved infectious diseases of the respiratory system?
A. This stretches my memory. I can't recall the subject of each and every one of these.
Q. Okay.
A. But I don't believe that a respiratory infection was the principle issue in any of these cases, to the best of my memory.
Q. Any tuberculosis that you recall?
A. Tuberculosis was part of the issue in No. 9, and that's the only one that I can recall that tuberculosis played a role in it.
Q. Of the 34 items that are on Exhibit No. 2, do you know percentagewise on how many of those items you were retained by a defendant versus a plaintiff?
A. I'd say plaintiff about 10 to 15 percent of these.

Q. Do you maintain copies of any of the deposition and/or trial testimony that you've given at your office?
A. No. When things are finished, I discard those things, as I said.
Q. Do you know which of these actions you may have provided trial testimony in as opposed to deposition?
A. That will be hard. Let's think. No. 2 went to trial. No. 6 went to trial. No. 9 went to an administrative hearing before a judge. I believe No. 16 went to trial. Well, maybe not. I can't remember. Oh, I don't know about 16. I think 24 went to trial. This is hard.
Q. Just to the best of your recollection, Doctor.
A. No. 25 went to trial where I was not an expert witness. I might remark I was a fact witness.
Q. You were a treating doctor in that case or --
A. Not exactly. It was a suit against Vanderbilt University about some events that had taken place, and I was party to the discussions that led to decisions that Vanderbilt did one

thing or another, and I had to testify to that.
Q. Okay. Very good.
A. That's about the best I can do.

Q. Thank you, sir.
Again, I want to refer back -- well, we'll get to Exhibit No. 1 in just a minute. I have a copy of your CV dated June 17, 1998. This copy has some highlighting on it that I put on there, but since you don't have a copy, why don't we go ahead and mark this as Schaffner 3.
(Whereupon, the above-mentioned document was marked Exhibit No. 3.)
BY MR. JEKEL:
Q. Take a minute to review what I have marked as Exhibit No. 3. I just want to make sure that it's up to date and if you have any new publications, texts, things of that matter that would be added on there, that we go over those.
A. Well, this is dated June 17th, 1998, and I know there have been changes since then.
Q. Maybe at a break you could get me a more up-to-date version, and we could just make it an exhibit to the deposition, would that be acceptable?
MR. LATHAM: We've got an updated one

that we can provide.
MR. JEKEL: Can I take a quick look at it?
MR. LATHAM: Sure.
MR. JEKEL: We've got one here marked June 12th, 2000. Just want to make sure I see all the new stuff.
MR. LATHAM: Could we take a quick break while we look at this?
MR. JEKEL: We'll go off the record for just a minute, gentlemen and ladies on the phone.
(Discussion off the record)
MR. JEKEL: We're going to substitute Exhibit No. 3, which was previously marked as the June, 1998 CV with the June 12th, 2000 CV. Has anybody got a problem with that?
MR. LATHAM: Fine with me. I'll take the sticker, madam court reporter, and place it on the new one. Good enough?
BY MR. JEKEL:
Q. Dr. Schaffner, is the CV that we marked June, 2000 up to date?
A. Yeah, reasonably.
Q. Are there currently publications that

are not reflected in your CV which you are working on presently or submitted for publication?
A. Actually, there may be a -- yeah, I think there is on page 27, there's probably one more after that, some publication and patient care having to do with influenza.
Q. Okay.
A. That's the only one I can recall. The only other thing that's a slight change here is that in front of the CV, in the Professional Societies on page 3, No. 4, Infectious Diseases Society of America, I've had a lot to do with that

organization, and I've just been elected a national counselor to that, you know, to the board.

Q. Very good.

A. Thank you.

Q. Are those the only changes that you think need to be made today to your CV?

A. I believe those are the only ones, yeah.

Q. Okay. Very good.

You are a medical doctor, Dr. Schaffner?

A. Yes, Mr. Jekel.

Q. And you obtained your medical degree from Cornell?

A. Cornell University Medical College, yes.

Q. And you are board certified in internal medicine, infectious diseases, and preventive medicine?

A. Yes.

Q. I'd like to just break those down, if we could. Quite simply, give us a simple explanation of what is internal medicine.

A. Internal medicine is the -- relates to the understanding of diagnosis and care of patients who -- adults who have diseases that are not taken care of through surgery. That would be the easiest way to describe it.

Q. Would that include patients with coronary heart disease?

A. Yes.

Q. Would it include patients with other vascular-type diseases?

A. Yes. It could, to the point that they might need surgery, for example, but a patient with diabetes might have vascular disease that might fall under the regular care of an

internist.

Q. Hypertension?

A. Surely.

Q. Do you currently actually see patients on a day-to-day basis with regard to your practice in internal medicine?

A. I see patients on rotation as an infectious diseases consultant. Obviously, a lot of those patients are patients of other internists, and many are surgical patients, but I don't function as a general internist.

Q. Okay. When was the last time you actually practiced internal medicine?

A. Generally internal medicine, that would be through about the mid 1980s. Well, I think I can tell you more specifically because --

Q. It's in your CV?

A. Well, only by inference. Hold on a moment.

Until sometime in 1982 when I was asked to chair the Department of Preventive

Medicine, and at that point, because there's just so many hours in the day, I had to give up my practice of general internal medicine.

Q. So when you see patients on rotation

now, can you tell me what that includes? Will you prescribe treatment for those patients?

A. Yes.

Q. Will you prescribe testing for those patients?

A. Surely.

Q. Will you prescribe follow-up care for those patients?

A. Yes. And perhaps just not to be a stickler, but we might refine the word prescribe, since most of my practice is consultative practice, we offer suggestions to the primary care physicians in all of those areas, but they have the ultimate responsibility. When I admit patients myself, and I occasionally rotate on the admission, the infectious disease admitting service, then that would pertain.

Q. So is it fair to say that currently your internal medicine practice is limited to those types of patients you may see while you're on rotation?

A. Surely.

Yes.

Q. Now, you're board certified in infectious diseases. And, you know, that sounds

to me like it covers an awful lot of ground. Can you give me a short explanation of what your day-to-day practice in infectious diseases really entails?

A. Infectious diseases in this context is one of the subspecialties of internal medicine, and you get further training in that area, and my current practice in infectious diseases occurs when I have the responsibility for the infectious diseases consult and the infectious disease admitting service at the Vanderbilt University Hospital, and I do that in the context of having infectious disease fellows and residents and occasionally students with us, so it's both a service and a teaching service. It's quite typical of academic medical centers in that regard.

Q. But you actually admit and treat patients under your infectious disease practice here at the hospital?

A. Yes. The various subspecialties, cardiology, pulmonary medicine, kidney disease, all have admitting services at the Vanderbilt Hospital, so if the patient's illness falls into that category, principally, obviously, they can

have things and other illnesses simultaneously, but one of the physicians in the appropriate specialty would be their admitting doctor, and I

fill that role when it comes to infectious diseases when I'm on rotation.

Q. Now, you're also the Chairman of the Department of Preventive Medicine here at the University, and you are board certified in preventive medicine, correct?

A. Yes.

Q. Tell us a little bit about what -- what is the goal of preventive medicine?

A. Well, generically speaking, the name is self-evident. It teaches the discipline and does research in the discipline that tries to identify risk factors for disease, and it uses a variety of interventions to try and prevent disease. This can be expressed on an individual basis, an individual patient with their physician, or when extended to the community, it blends into public health.

Q. Right. So as preventive medicine relates to lung cancer, what would the goal be in that regard? Would it not be to get people to stop smoking?

A. Actually, I guess the first goal might be to prevent people from starting smoking, and then to stop smoking, and since there are other things that are predisposing factors to lung cancer, you would try to make sure that, for example, they, if they work in the asbestos industry, that the occupational standards that they have for precautions there are fulfilled and the like.

Q. Doctor, do you have an opinion in the absence of cigarette smoking why their exposure to asbestos can cause lung cancer?

A. I don't.

Q. How much of your work as the Chairman of the Department of Preventive Medicine here at Vanderbilt is spent trying to get kids and adults to stop smoking or not begin smoking?

A. Basically, none, because that activity in our medical center, it's my understanding is being led by some of the oncologists.

Q. And those would be people at the Ingram Cancer Center?

A. I'm sure they're affiliated with the Ingram Cancer Center, yes.

Q. Because you don't actually treat patients with lung cancer here at Vanderbilt, do you?

A. At the Vanderbilt University Hospital?

Q. Yes.

A. Oh, certainly.

Q. Do you treat them for their lung cancer or do you treat them for other problems they may have?

A. I beg your pardon? I may have misunderstood your question. By you, you meant me

personally?
Q. You, Dr. Schaffner, personally.
A. Rather than in the southern parlance, y'all?
Q. Y'all, that's right.
A. I do not treat, so let me clarify.
Q. Thank you.
A. I do not specifically admit patients with lung cancer for reasons of their lung cancer, and I do not consult on them regarding their therapy. If patients with lung cancer sometime during the course of their illness develop or are considered to possibly have an infectious

complication, that might be my role in their care.
Q. Okay. So is it also true then, you've not done any research or published any articles as it relates to health and smoking?
A. One might be considered within that category broadly construed. When I was still a very junior faculty member in my figurative short pants, I had a relationship with a chemist here at Vanderbilt, and we did a series of studies on whether certain materials could be detected in the breast milk of nursing mothers. One of those studies, in his laboratory he determined nicotine concentrations, but that's, I think, as close as I can come to the arena that you've described.
Q. Would you be able to identify that article on your CV?
A. This will take a moment.
Q. I understand. I know it's a long list.
A. It would be No. 45 on page 14.
Q. Thank you. Do you know if that was a peer review journal?
A. You bet.
Q. I'm sorry?
A. You bet.

Q. Do you -- I don't recall, I looked through it a while back, but do you have journals for which you are on the board to review articles?
A. Yes.
I don't know if I've listed them on the CV. I can't remember that.
Q. I thought I saw something, but it may have been somebody else. Can you just identify the journals for which you perform that function?
A. Well, you know, you perform some on a more or less regular basis and then some are pretty rare, but I would include among them the New England Journal of Medicine, JAMA, J-A-M-A, the Annals of Internal Medicine, Journal of Infectious Diseases, Clinical Infectious Diseases, Infection Control in Hospital Epidemiology, the American Journal of Epidemiology, European Journal of Clinical Microbiology, and Infectious Diseases, journal called Infection, American Journal of Tropical Medicine Hygiene, and then others from Pediatric Infectious Diseases Journal and others

that you get asked to review manuscripts from time to time.

Q. Just for the benefit of those folks participating by the telephone, article No. 5 on

Dr. Schaffner's CV is entitled "Determination of Nicotine Concentrations in Human Milk" from the American Journal of --

A. Diseases of Children.

Q. Diseases of Children, 1976 with a Ferguson.

Do you recall whether that article determined that the source of the nicotine in a mother's breast milk was from cigarette smoking?

A. It's been a long time, but I believe we had some nonsmoking mothers, some who smoked a little, and some who smoked more, and I believe they're along that gradient, there was more nicotine discovered in the breast milk, I believe. That's a crude summary of the results.

Q. All right.

A. But I haven't looked at that article in ages.

Q. Okay. I won't ask you any more about it.

In your position here at Vanderbilt, do you teach medical students?

A. Yes.

Q. Currently what courses are you teaching or classes or lectures are you giving?

A. It's, you know, medical school teaching doesn't always happen in the structure of a course, but there is a required course in preventive medicine for which I have titular responsibility, and with a course director we design that course. I give talks in that course having to do basically with infectious diseases. I talk to the students in other courses and on other occasions about other aspects of infectious disease often having to do with infection control, preventing transmission of infections from patient to patient, and from indeed patients to themselves, and then when we see patients, when I perform my clinical service responsibilities, we often have medical students with us at that time and provide them an introduction to clinical infectious diseases practice, but that's not in a structured classroom environment. That's clinical as it's commonly known, bedside teaching.

Q. Right. How much of your time do you spend on the clinical aspects as opposed to more the scholarly aspects?

A. Of my total professional life?

Q. Of your total professional life.

A. As you may have been able to discern,

we sometimes do two things at the same time. You're teaching -- you're taking care of a patient, but you're also teaching at the bedside,

so it's hard to parse those things.
Q. I would consider that clinical though for purposes of my question.
A. So you're mostly interested in the stand-up lecture room seminar teaching format for this purpose?
Q. Research and writing as opposed to being with a patient at a bedside on rounds, et cetera.
A. In addition to that, I have administrative duties as Chairman of the Department, and so which piece were you just --
Q. I'm more interested to determine how much time you actually spend with patients, either be it bedside teaching, on rounds, et cetera.
A. Yeah, okay. Well, I'm on service three or four rotations a year. Each of the rotations is about 3 weeks, and during that period I'd say 70 to 80 percent of my day is devoted to taking care of patients.
Q. In the last year, can you tell me how many patients that you've seen or treated that had

lung cancer, even though you weren't treating them for lung cancer?
A. I don't think I can tell you that.
Q. Was it more than one?
Was there at least one?
A. I'm loath to say there were none. It was not a huge number, not a large number.
Q. But it was at least one?
A. I can't remember.
Q. How many patients in the last year do you think you've seen or treated that had coronary heart disease?
A. Well, we have a very sick population at Vanderbilt, so some of them have underlying diseases, and many of them would have had some degree of underlying coronary heart disease or and/or hypertension.
Q. Are those patients rather that you actually treat?
A. If you mean are those patients for whom I have primary responsibility as a physician, the answer would be no. Again, I would be seeing those patients principally in consultation. Now, on occasion, a patient with coronary artery disease and an infection will be admitted to the

hospital, and if I am the admitting doctor, I would have principal responsibility for them, but it would be -- the modus operandi of that would be because they have infection.
Q. Can you tell me of the patients within the last year at Vanderbilt that you have seen that had underlying coronary heart disease, do you have any estimation as to how many of those patients were smokers or smoked within the last five years?
A. I would have no answer for that beyond saying some.

Q. When you were practicing internal medicine, if a patient presented and had some coronary heart disease, is one of the things you would ask them is, do you smoke?
A. Obtaining a smoking history would be part of the routine history of every patient.
Q. Okay. Even an infectious disease patient?
A. You asked me that question, the former question in the context of my general internal medicine practice, and --
Q. Assuming, yeah.
A. And so the answer was, it's part of

the routine medical history of every patient you see in general medical practice. Smoking history becomes more or less relevant in infectious diseases depending upon first the underlying circumstances that bring the patient to the hospital, and then whether or not the patient's illness involves the respiratory tract or some other aspect, so it might or might not be germane.
Q. Now, Dr. Schaffner, you're not a cardiologist, are you?
A. I'm not a cardiologist.
Q. And you're not a pulmonologist, are you?
A. Neither.
Q. And you're not an oncologist?
A. Correct.
Q. Do you consider yourself an epidemiologist?
A. Yes, small e.
Q. Small e. And in what aspects or -- what's your practice as it relates to epidemiology?
A. I'm a long-term consultant to -- let me back up.
I spent part of my training at the

Centers for Disease Control fulfilling my Selective Service obligation and was introduced to the principles of epidemiology and epidemiologic field practice, investigating outbreaks of disease. I have been, when I returned to Vanderbilt, I became a consultant to the Tennessee Department of Health, our state health department, and I have remained a very, very active consultant with them for the subsequent, I guess, must be close on to 30 years. In that context, I have been very involved in communicable disease control activities which often have involved investigating outbreaks of disease, and that's where we apply epidemiologic principles.
The other arena in which I function as a small e epidemiologist is for that same period of time, since I have returned to Vanderbilt, I have been the director of the medical center's Infection Control Program, which is also called Hospital Epidemiology where we try to keep the infectious risks to patients,

visitors, and personnel as low as possible.
Q. Dr. Schaffner, would you agree with me that as it relates to questions of screening, diagnosis, and treatment of lung cancer, that

those issues are better left to experts in cardiology, pulmonology, and oncology?
MR. LATHAM: Object to the form of the question.
THE WITNESS: I think all of those disciplines can make contributions to those areas. But I don't know that we want to -- one would "leave" them to just those and in particular the issue of screening, which although it can involve all those arenas, rests on epidemiologic principles.
BY MR. JEKEL:
Q. Let's just talk about treatment of lung cancer. Do you think you, as an expert in internal medicine, infectious diseases, and preventive medicines, have more expertise as a cardiologist, pulmonologist, or oncologist in how to treat a lung cancer?
A. No.
Q. Other than the article on nicotine that you pointed out, have you been involved in any other research or publication of an article or book that dealt with cigarette smoking and/or lung cancer?
A. No. I don't think so.

Q. During your work for Mr. O'Tuel's firm, have you ever asked to review any internal documents from RJR or any other tobacco company to see their research on the effects of cigarette smoking and/or nicotine?
A. I have not.
My expertise hasn't related to that. The questions they've asked me haven't gone to those questions.
Q. Have you ever designed a Medical Monitoring Program of any sort?
A. Could you help me by defining medical monitoring a little bit for me?
Q. Well, let's -- a screening program for a certain disease over a long period of time covering a large population first.
A. Yes.
Q. Okay. As it relates to screening, what types of diseases or illnesses have you been involved in putting into place a long-term screening program?
A. They're all infectious diseases.
Q. Did you do any of that work for the CDC?
A. I don't believe while I was an active

duty public health service officer at the CDC I can recall putting into place a screening program in the course of my two years there.

Q. When you are designing, can you tell me at least how many of these screening programs you've designed over the course of your professional background or history?

A. Most of them have occurred in the context of first my work as the hospital epidemiologist, the director of the Infection Control Program, and let me give you a quick example. From time to time we have an infection problem within the institution, perhaps with a bacteria that is resistant to multiple antibiotic agents, for example, in an intensive care unit. In addition to investigating the reasons for that, we might think it's important enough to identify all individuals, all patients who are infected, even though they may not yet be "a case," they may not manifest symptoms, so we would conduct a screening program using bacterial cultures of all the patients in the intensive care unit, and we might run that for a period of time for all new admissions or we might periodically screen everyone who's in the unit, let's say once a week,

for example. And so many of them have been in that context.

We might indeed screen some medical personnel also to see if they were carriers of the organism that we were interested in, and then analogously from time to time in my work with the Tennessee Department of Health, we conducted similar screening programs, usually related to an acute communicable disease outbreak.

Q. I hate to make it too simple, but is there a checklist or a list of items that you, when you are developing a screening program, that you will go down and try and define or put limits on before you implement a screening program, for example, how many people are we going to screen? Are we just going to screen people in ICU, or do we need to screen people outside? I'm just trying to get the process by which you develop and implement the screen.

A. Yeah, you would always do something like that.

Q. Can you walk me through the steps that you, Dr. Schaffner, may take in developing and implementing a screening program?

A. Well, very quickly, and I wouldn't

want to be limited to this in an absolute way, because it's off the top of my head, but you would have to have the problem reasonably well defined.

Q. Okay.

A. You would like to identify the population at risk, which is the target for the screening program. You would like to have a modality that you were going to use to screen, what's the screening mechanism that you're going to use.

Q. Would that be like a bacteria culture?

A. Such as a bacterial culture.
Q. All right. I'm sorry.
A. You would figure out exactly, for example, to follow that example along, which anatomic sites you would screen.
Q. All right.
A. You would make sure that the method you're using is sufficiently sensitive and specific to do the task. You would like to have some idea of how long this screening program is going to go on. You would wish to make sure that in this instance the laboratory is ready to process the specimens in an efficient, timely, and

accurate fashion. There would be issues of cost. You would have to be clear in your own mind what to do with those tests that are found to be positive as well as those that are found to be negative, and you would have to be sure that you had some goals that resulted in a net benefit from doing the process.
Q. Let's just take a look at that last one, the goals, the net benefit. What do you look at in terms of that? Can we help the people with the disease? Is that what the net benefit is?
A. Well, if we're pursuing my little example, it might be to prevent transmission of this bug to others, and so if you determine that someone had a positive culture, you could institute the appropriate isolation procedures, or you might move all the positive people to one area of the intensive care unit, patient placement, that's called, you could institute education so that the nurses and others who care for that patient, the physicians are made aware of the fact that that person is positive and they take not only their routine, we hope rigorous aseptic practices, but they are even more aware of their importance, so each instance has a different set

of goals, but you have to have them clearly in mind when you begin.
Q. As it relates to lung cancer, do you think that extending someone's life expectancy with lung cancer, be it a year, two years, six months, would be a net benefit to that individual?
A. I think that that's likely a net benefit if you could be sure that the process would do that, certainly.
Q. Is there a minimum limit as it relates to extending an individual with lung cancer's life that you would require like it wouldn't be a benefit unless we get them three more months or a year or something like that, or is one day sufficient?
A. Well, those are always tough questions and are the things that you consider at the time. I don't think that there is a rule out there that you can grasp on.
Q. But in general, extending one person's life would be a net benefit to that

person?
A. No, I wouldn't say that as a general rule. You haven't put any time limits on it, and you haven't said anything about the quality of

life. We have people in the intensive care unit who are mortally ill, and I think, for example, and in discussions with their families, physicians now in agreement with everybody discontinue intensive therapies because even though one can prolong life, the life is devoid of meaning and indeed might cause anguish for survivors.
Q. So a real limitation you put on extending a person's life as part of that quotient would be the length of extending the person's life and then the quality of that person's life during the time it's extended?
A. Indeed, those would be important considerations. It might not be the only considerations, but they're certainly very important ones.
Q. Is there a text or a publication that you believe provides a fairly good discussion on screening programs, as you've discussed, implementation and design of a screening program?
A. I think there are numerous monographs, books, texts, and I'm sure some journal articles on the principles of screening today. They're in most of the clinical epidemiology texts and the general epidemiology

textbooks.
Q. Is there any one that comes to your mind as being authoritative or the one that if you went into the library now would be the first one you went for?
A. No. The first one I went for might be the first one on the shelf, so -- I don't think there is a single authoritative text.
Q. And I just want -- a lot of this, Dr. Schaffner, is just to make sure exactly what we can expect from you at trial some day, but any clinical epidemiological texts or a similar book that discussed screening programs would be sufficient. I just want to make sure you don't come at trial with a book on clinical epidemiology that discusses all of these screening program requirements that you didn't disclose to me today.
A. That's a --
Q. Do you know, is there such a book in your mind?
A. There is no single book in my mind. I have not identified one for you here today.
Q. Okay. Or for Mr. O'Tuel?
A. Oh, not for Mr. O'Tuel either.
Q. Very well. Then I feel comfortable.

Have you done any work for the United States Surgeon General on any disease topic?
A. Mr. Jekel, when I was a commissioned

officer in the United States Public Health Service, we were sent in the field on the orders of the Surgeon General. That's the way it was stated. But I don't think you mean that.

Q. How rude of me. Outside of your experience as a public health --

A. -- commissioned officer in the Public Health Service.

Q. Commissioned officer in the Public Health Service, have you done any research or worked with the Surgeon General's office?

You got to remember I was an infantryman. We didn't know any of that.

A. I have been a frequent consultant to the CDC, but I don't believe I can recall an instance where I have specifically been a consultant to the office of the Surgeon General.

Q. Okay. And when was the last time you were a consultant to the CDC or on what issue, topic, disease, if you will?

A. Well, the last time was July, I think, and a group of us were asked to come back

and to help the CDC think about and plan the 50th anniversary activities of this program at the CDC, which is train epidemiologists. It's called the Epidemic Intelligence Service. That wasn't disease specific, and that was more fun than hard work.

Q. Sounds like a good group.

A. But we're recipients of contracts and grants from the CDC either directly or now even more frequently through and in collaboration with the State Health Department, and in that sense we are frequently gathered with colleagues at the CDC in planning conferences and the like. All of those things have to do with communicable diseases.

Q. All right. Let's go over your report a little bit now. Let me get you a copy in front of you.

Now, I don't see a signature page on this report. Did you sign any copy of the disclosure?

Any version?

A. Excuse me. I don't -- perhaps we're not quite on the same figurative page. I don't believe this is a report. I did not create a

report and submit.

Q. It's -- you're right. Technically, it's an Expert Witness Disclosure. Did you sign the disclosure form, any version of the disclosure form?

A. No. I was not asked to do that.

Q. And is it fair to say that this is not a disclosure that you drafted sentence for sentence, word for word?

A. Oh, for sure I have not done that. I recognize my language in here, but certainly the tone and stuff, because it's the product of

discussions with Mr. O'Tuel.
Q. Now, subject matter of your expert testimony, I just want to take that first sentence. "Dr. Schaffner will be offered as an expert in the field of infectious disease and medicine." Can you give me any more definition on medicine? Is that the whole ball of wax medicine or a limited area there?
Is that your word?
A. Let's continue the sentence because I understand it perhaps a bit more in its entirety.
Q. Okay.
A. I'll be offered as an expert in the

fields of infectious diseases in medicine as they relate to the role of an infectious disease specialist in the diagnosis and treatment of infections of the respiratory system and infectious disease processes in general.
Q. Okay.
A. I'll stand on that.
Q. How does that relate to diseases caused by cigarette smoking and lung cancer?
MR. LATHAM: Object to the form of the question. That's confusing. Can disease be caused by lung cancer?
BY MR. JEKEL:
Q. As it relates to a disease of the respiratory system and/or lung cancer.
MR. LATHAM: Okay.
THE WITNESS: Would you restate the question?
BY MR. JEKEL:
Q. Yeah. What does that statement have to do with the medical monitoring class action that the plaintiffs have brought here? What do infections of the respiratory system have to do with diseases that are caused by smoking and/or lung cancer?

MR. LATHAM: Object to the form of the question. It calls for a legal conclusion. Subject to that, you can answer the question.
BY MR. JEKEL:
Q. Do you know what that means?
A. I think I know what it means, because --
Q. Did you write that sentence?
A. Well, it goes on to the next sentence. No.
Q. That one sentence?
A. I didn't write that sentence, but I didn't object to it.
Q. Can you tell me what your understanding of that first sentence is, what would that include as it relates to this case?
A. Well, permit me to go on to the second sentence, which kind of, I think, extends the thought and perhaps makes it a bit more specific.
He, I, will testify regarding

infectious diseases in West Virginia and their relationship to the plaintiffs' proposed Medical Monitoring Program.

Q. All right.

Infectious disease and medicine as they relate to the role of an infectious disease specialist in the diagnosis and treatment of infections of the respiratory system and infectious disease process in general.

Let's stop right there. Is lung cancer an infection of the respiratory system?

A. I'm not familiar enough with the molecular biology of lung cancer to comment on the role of oncogenic viruses and generation of that disease, and viruses thought broadly are within the context of infectious diseases, but -- so if you will permit me to exclude that notion -- I've forgotten your question. Sorry.

Q. Is lung cancer, if you want to break it down by type of cell, type lung cancer, we can do that. In general, is lung cancer an infection of the respiratory system?

A. In general, lung cancers are not thought to be infectious diseases.

Q. Okay. So the development of lung cancer, the growth of tumors in the lung, that's not part of the infectious disease process in general, is it?

A. No. I think that that's a phrase

that's a generic phrase that's in there such that if we get into the discussion of an infectious disease, I can talk about the infectious disease process.

Q. Okay. Do you understand that the plaintiff's Medical Monitoring Program has sought to test or screen for any type of infectious disease of the respiratory system?

A. Well, I'm not sure that I have a very clear idea of the actual structure and design of the Medical Monitoring Program. I'm given to understand in conversation with the attorneys here that that's kind of still a work in progress, if you will.

The issue is, isn't it, that whether infectious diseases can complicate the diagnosis, specific diagnosis of some of the diseases in question.

Q. Okay. And that's what you understand your real role in this litigation to be?

MR. LATHAM: Object to the form of the question.

BY MR. JEKEL:

Q. To understand how the screening program or monitoring program that the plaintiffs

have proposed may be complicated by the incidence of infectious disease in the class population; is that fair?

A. That's pretty close, yes, I think that's pretty accurate.
Q. Last sentence in that first paragraph under Subject Matter of Expected Testimony. "Dr. Schaffner may also comment upon the" -- I'm sorry -- "the opinions expressed by other witnesses and/or additional evidence developed before and during the trial to the extent they relate to his area of expertise."
I noted a couple of expert reports in the pile of materials you have in front of you, one being the report of David M. Burns, MD.
Are you, as you sit here today, prepared to discuss the opinions of Dr. Burns?
MR. LATHAM: Object to the form of the question. Very overbroad. There's many things in that document that don't relate to medical screening at all.
MR. JEKEL: Yes. I'll limit it to the medical monitoring aspect of Dr. Burns' report.
THE WITNESS: I'm happy to discuss

aspects of that, not each and every aspect because there are areas outside of my expertise and areas where my area of expertise would not specifically interact with elements of the proposed monitoring program as recorded in this document.
BY MR. JEKEL:
Q. All right. And we'll go through that in just a minute. Quite honestly, Dr. Schaffner, it will move things along considerably if you think something is outside of your area of expertise to just let me know and I will move on.
A. Thank you.
Q. All right. Are there, or can you identify for me, Doctor, diseases that in your opinion are causally related to smoking cigarettes that mirror or could be confused with infections of the respiratory system?
MR. LATHAM: Object to the form of the question. It's compound. Subject to that, you can answer the question.
THE WITNESS: Could you restate the question? I lost it in the exchange.
MR. JEKEL: That's all right. Maybe she can read it for us again, or I can break it down. Let's do it the easy way.

BY MR. JEKEL:
Q. Dr. Schaffner, do you have an opinion that certain diseases are causally related to smoking cigarettes?
A. In a general way, yes.
Q. You are a medical doctor. In your capacity as a medical doctor, would you agree with me that cancer of the lip, mouth, and pharynx could be caused by cigarette smoking?
A. That's -- I'm not sure about those. I'm not sufficiently acquainted.
Q. All right. Well, let's, again, I'll

-- I'm referring to Dr. Burns' report, page 3, paragraph 7. And let's just -- of the diseases listed in paragraph 7 of Dr. Burns' report, are you in agreement on any of those items that you believe cigarette smoking causes the human disease identified?

A. I think cigarette smoking, if it's of sufficient dose and long enough can be generally, because this is not my area of expertise, can be generally thought of as being related to cancer of the lip and the oral cavity and certainly to the lung. I'm less aware of some of the other details, although I'm generally aware, as I read

down the list, also its association with cardiovascular disease and what we might call chronic pulmonary disease. Bronchitis, emphysema, chronic airway obstruction, for example.

Q. And you refer to those as pulmonary disease?

A. Chronic pulmonary disease, right. Chronic obstructive pulmonary disease. Bronchitis is something more specific, but in a general way.

Q. Now, of those I checked off six items on here, of those six items that you and Dr. Burns are in agreement that cigarette smoking causes, is there an infection out there that could cause any of these items?

MR. LATHAM: Object to the form of the question. It misstates his prior testimony. Subject to that, you can answer the question.

THE WITNESS: Are there infections that can cause bronchitis and emphysema and chronic airway obstruction?

BY MR. JEKEL:

Q. Yes.

A. There are certainly infections that can increase those symptoms, and it is thought that, for example, simple whooping cough in

children can predispose them to adult bronchitis and chronic pulmonary disease, for example.

Q. Would that be a child who had ever smoked before?

A. I don't believe smoking played a role in that.

Q. All right. Let's talk about a situation in this instance, we have a patient, he presents with bronchitis, emphysema, COPD. That patient has a smoking history of 10 pack years. Would there be, in your opinion, an infection that could be the cause of those symptoms or those diseases?

MR. LATHAM: Object to the form of the question. Very confusing.

Subject to the question, you can answer.

MR. JEKEL: We'll let the doctor tell us what's confusing and not the lawyers. You can put your objection on the record, but Dr. Schaffner is intelligent enough to tell me when

I'm not being clear.
MR. LATHAM: The objection stands.
MR. JEKEL: Certainly. You can just say, objection. You don't need to tell the

witness.
THE WITNESS: I'm not exactly clear on what it is that --
BY MR. JEKEL:
Q. All right. Let's take this, we have a patient; he presents with bronchitis. That patient has a smoking history of ten pack-year history. Are you familiar with how we calculate a pack year smoking history?
A. Yes.
Q. Do you know what a ten pack-year smoking history is?
A. I do.
Q. What's your definition of a ten pack-year smoking history, just so we get it on the record and we're all not confused.
A. Pack a year for ten years.
Q. All right. Do you think that is a sufficient smoking history to cause bronchitis?
A. That's not right.
Pack a day for ten years.
Q. Pack a day for ten years.
A. Now, shall we start again?
Q. Yes. Is a ten pack-year history, in your opinion, sufficient to cause bronchitis or

emphysema?
A. Oh, that's something that I have no opinion on because those are data that I don't know.
Q. Okay. What types of -- earlier you said that there were infections that could -- I don't think you used the word exacerbate, but may complicate the symptoms that we see from smoking disease.
A. Oh, I don't think so.
Q. No? All right. Maybe I'm confused.
A. I think the comment I made that you are referring to has to do with when one screens a population for some of these diseases, in an attempt to pick up, for example, cancer of the lung, you will run into lesions that look like cancer of the lung, but in truth were caused by infections that the patient had previously.
Q. Right. Now, and that, if we go back to your expert report, is that what you mean -- I'm looking on page 2, the first paragraph, the sentence beginning with the term, "Consequently, persons in West Virginia are more" --
A. I have to find that. "Consequently," in the middle of the paragraph.

Q. "Persons in West Virginia are more likely to have false positive radiographic studies." Is that kind of where we are now? I

mean, you said they have lesions, they might show up, they might look like tumors, but in fact they were caused by an infectious disease.

A. Correct.

Q. Is that not what you are communicating here in that sentence, somebody is communicating here?

A. That's what this document was attempting to communicate.

Q. I got you. Now, you say positive radiographic studies. What radiographic studies are you including in your -- is that CT scans?

A. Well, it would be conventional chest radiographs, but also CT scans and, again, it's my informal understanding that the issue of PET scans has also arisen in this context.

Q. So that would include all of those?

A. Yes.

Q. Is there a radiographic based study that you believe can differentiate a lesion in a lung caused by an infectious disease versus one caused by or one that is truly a lung cancer?

A. I think that there is no single criterion that exquisitely completely distinguishes the two, but speaking generically, if the lesion has some calcium in it, that makes it much more likely to be a benign lesion probably as a consequence of a prior infection, although from time to time one can be fooled. It's difficult in medicine to expect 100 percent conformance.

Q. And which, the conventional X-ray, a CT scan, and a PET scan of those, do you have an opinion as to which is more likely to identify a lesion as containing calcium?

A. I don't. I would leave that specific question to the radiographers.

Q. And what I would like to do is, what is, other than your vast experience in treating individuals with infectious diseases, what studies are you relying on that support the proposition that you can see lesions under radiographic studies that appear to be lung cancer, the beginning tumors of lung cancer, but are in effect infectious diseases? Are there studies out there that look at that?

A. I'm sure there are. I can't cite

them to you chapter and verse.

Q. Okay. Let's talk --

A. I suspect there are.

Q. So as you sit here today, you cannot identify for me one text or one peer review article that has looked at that specific issue?

A. That's correct.

Q. Now, let's talk about your personal experience. Have you had an experience where you saw in a patient on a radiographic study, X-ray, CT scan -- do you review PET scans, by the way?

A. I don't as the PET scan, the official

reader, but we have a PET scan here, and we run into them, as it were, from time to time in the care of our patients.

Q. Right. So you're familiar really with all three of those types of radiographic studies?

A. Yes. Again, in a general way.

Q. In your experience, have you been faced with the situation where you thought, A, this is an infectious lesion on somebody's lung where it turned out to be a cancerous tumor or vice versa, saw something that you thought was a cancerous tumor and then it turned out to be an

infectious lesion?

A. Well, I dare say occasions have occurred where your -- my experience was such that when I saw the patient, I, in effect, in trying to assess the likelihood of whether a lesion was infectious or malignant or something else, that I thought it was more likely one than the other, and it turned out to be the reverse. I think it is more common to have a lesion etiology unknown that requires further investigation. I mean, our sense of -- well, I think it is fair to say, we develop -- I guess the three categories, this is likely to be non -- this is likely to be benign, possibly infectious. Oh, oh, this is likely to be malignant, or in the middle, huh, beats the heck out of me. Can't say.

Q. And in which of those -- so even in your practice, you are faced with all three of those situations, correct?

A. Surely.

Q. And what is your standard practice when you are faced with that, under all three of those scenarios, what is the next step?

A. Well, the next step is often to get radiographic consultation. You might do further

radiographic definition if, in consultation with the radiographer, you think that that is useful.

Q. I'd like to -- I'm not sure I understand that. In that situation, are you saying, all right, I've got a chest X-ray, I can't really tell from the chest X-ray, so let's go for a CT scan?

A. That would be a common approach.

Q. I just want to make sure I follow you when you say we'll go back for more radiographic evidence. I'm sorry. Continue on. What might be the next step?

A. Well, you would have to assess the patient's total circumstance, but let's for the moment talk about a patient who is otherwise reasonably well and has what we might say a reasonable life expectancy. We're not talking about assessing somebody who's morbidly ill. It then is common for one to want to make a more specific tissue diagnosis, and in consultation with the pulmonologist might assess not only the

characteristics of the lesion, but its location and come to a decision about what to do next. Can it be reached by bronchoscopy, do you have to do needle biopsy, for example?

Q. As it relates to location of the lesion, that's something that you can do just through the radiographic studies, is it not?

A. Largely, yes.

Q. Now, do you or are you prepared to talk about types of cell-type cancers, lung cancers, and where they are most likely to appear on the lobes of the lung?

A. No. I'm here as an infectious disease doctor, and I mean, we could discuss that, but I don't think that's useful because that's not my area of expertise. I don't hold myself out as an expert in that matter.

Q. Okay. Now, assuming everything else is equal, you mentioned a bronchoscopy as another tool as to differentiate whether we are dealing with benign, possibly malignant, or possibly infectious, the three categories that you gave me earlier?

A. I don't think those are exactly the three categories, but it would be a diagnostic modality which might next be employed, again, depending upon the location of the lesion and the likelihood that the bronchoscopy will actually yield the material that can help you make a

diagnosis.

Q. Let me ask you this, prior to this stage or we've gotten to the three categories, can you look back and do a patient history to also help you in determining whether we fall into one of these three categories? For example, were they in an area where there was an epidemic of a certain infection, have they been around certain parts of the world, are they a smoker, how heavily are they a smoker, is there any medical history that would help you differentiate in those categories?

A. Certainly by the time we would get to this spot in the investigation of the patient and the patient's problem, one would have taken a medical history, which would include a past medical history, a family history, a history of prior exposure to tuberculosis and the like, and you would have the contents of the earlier investigation and perhaps some historical information from the patient, and all of that would be part of the information that you would have as you looking at, for example, the X-ray, where there was what we might call a spot on the lung, helping you to try and assess the likelihood

of putting it in the likely benign, possibly malignant, or indeterminate category along with the physical characteristics of the lesion that

you have spotted. All of those, of course, are helpful, but none of them are definitive.

Q. What is the definitive mechanism, if there is one?

A. Well, the definitive mechanism, of course, is tissue.

Q. And is that the -- as you go down your list of what you do and who you consult and all of the like, is that the last step, take a tissue sample or a biopsy?

A. I'm not so sure it's always the last step, but it is what you try to do to make a definitive diagnosis, and sometimes that fails, and sometimes there are other things that, for example, if it's subsequently discovered we're making this up as we go along here, that the patient has another lesion, you might be able to tap into that lesion. It's not as though every time you get the tissue you always get a definitive answer is what I'm trying to say. I mean, there are limitations to histopathology and its interpretation.

Q. Depending on the actual tissue that you get, you may not be able to make the determination one way or the other?

A. Correct.

Q. Now, is it your understanding that collection of tissue at a certain stage is provided for or not provided for in the plaintiffs' Medical Monitoring Program that's been put forth in the Blankenship matter?

A. Well, I haven't memorized it.

Q. Well, I think it --

A. But, well, anyway. I'm sure -- why don't you direct me to that?

Q. It's all right. We'll move on.

Again, I'm referring to Dr. David Burns' report. All of the highlighting that we see in here, is that yours?

A. Yes.

Q. Okay. Did the counsel or did the attorneys direct you to look at certain sections of David Burns' report?

A. They gave me this whole stack of material, and I wouldn't have countenanced that. I approached the material fresh.

Q. They didn't tell you, take a good

look at paragraph 9 in this Burns' report?

A. They did not.

Q. Okay.

A. Or anything like that.

Q. All right. And why don't you just take a few moments, I'm directing Dr. Schaffner's attention to paragraph 32 and subparts of the revised report of Dr. David Burns entitled "Medical Monitoring," and I believe that is where it is set forth, paragraph 32 really through 36, and if you would just take a moment to familiarize yourself with that.

Have you had an opportunity to review that, Dr. Schaffner?
A. Yes.
Q. We'll be referring to it off and on, so I just wanted to give you that opportunity. If I could direct you to page 17, paragraph C, I guess it's the 3rd paragraph or the 3rd sentence in paragraph C beginning, "The most promising of these scientific advances," have you found that sentence?
A. Yes.
Q. "The most promising of these scientific advances are rapid (single breath --

whole helical) capital CT and computerized molecular analysis of airways cell markers."
First off, are you familiar with that type of radiographic study?
A. Only in the most, most general way. Not really.
Q. Okay. So can you, as you sit here today, do you have an opinion as to whether that modality -- can we call that a modality?
A. Sure.
Q. Is that modality likely to confuse a malignant tumor with a benign lesion?
A. Well, I can't provide you here the data on that. I have seen no data to suggest that it can exquisitely distinguish those.
Q. Have you seen data to the contrary, that it cannot distinguish those?
A. No. The important data would be that it can't.
Q. It can't.
I did note that you had, in your stack of materials, the article from which Dr. Burns takes that statement. I don't think that one is it. I know it's in here. I saw it, but I just wanted to make sure while we're here we had

it. There you go.
Is that not the paper or consensus statement from the conference from which Dr. Burns takes his information on the rapid CT?
A. Well, I'm a little -- I'm not so sure I can tell you exactly because the folks who participated much in this also published the study in the Lancet, so I'm not sure that Dr. Burns relied solely on this, but this does appear to be the consensus statement of the First International Conference on Screening for Lung Cancer.
Q. And does the paper in which you have that, does it not start off, "Lung cancer kills more individuals than cancers of the breast, colon, cervix, and prostate combined"?
MR. LATHAM: Is the question does it say that?
THE WITNESS: Yes. It says that. It must be limited to the United States.
BY MR. JEKEL:
Q. The Medical Monitoring Program that

the plaintiffs have promulgated is going to be implemented in the United States, is it not?
A. No, no, no, no. I'm just curious because this is the First International Conference

on Screening for Lung Cancer.
Q. Are you aware of data outside of the United States that indicates lung cancer does not kill more individuals than cancers of the breast, colon, cervix, or prostate combined?
A. I'm not. As I say, I'm not a cancer epidemiologist.
Q. Moving on in that same, "Recent scientific advances create an extraordinary potential to develop a lung cancer screening program that would prevent untimely deaths of vast numbers of current or former smokers who remain at high risk despite smoking cessation. The most promising of these scientific advances are rapid (single breath -- whole helical) CT and computerized molecular analysis of airway cell markers."
You've not seen the data from which the conference relies upon in making that statement; is that correct?
A. I haven't seen the proceedings of this conference.
Q. Okay. I can assume then that you did not participate in this conference?
A. No. Certainly, I did not. It's

likely that some of these data at least come from the Lancet study, but there may be others. I just don't know.
Q. And the Lancet study says that low dose CT can greatly improve the likelihood of detection of small, noncalcified nodules and thus of lung cancer at an earlier and potentially more curable stage, does it not?
MR. LATHAM: Hold on a second. Read from the document and make sure he read it right.
THE WITNESS: Yes. That's the author's interpretation of their own studies, and as we will probably quickly agree, this is an early study, hasn't been confirmed by others, and it's done in a highly selected population.
BY MR. JEKEL:
Q. I want to go over in detail your criticisms of this Lancet study. Under the author's interpretations again, the statement does go on, in all fairness. "Although false positive CT results are common, they can be managed with little use of invasive diagnostic procedures."
Do you agree with the author's statements there?
A. I agree that that's what they

concluded.
Q. Yes. Absent that's what they concluded, do you, Dr. Schaffner, agree with the

author's statement?
A. It's a generic statement, and I don't think it would apply to populations, many populations outside the highly selected populations in which this study was done. This is a highly -- this is a conventional early first study investigating the modality of an agent. It's not a study that tests this modality in application to other populations.
Q. Are you saying that they were only looking at people with lung cancer so that they didn't have the potential or the problem of seeing benign lesions and confusing them with malignant? I'm just not sure I understand your statement.
A. Well, I certainly didn't that say.
Q. Well, you didn't say it in those words.
A. No. I didn't say that in those words or any other words.
Q. Or any other words? All right.
A. What I said was, this is a highly selective population. It's only done in New York

City. They only selected people of a certain health status, those that could potentially withstand thoracotomy, and it was selected from, even within New York City, only two locations, so this is not a very generic study.
Q. Okay.
A. It's like many such studies, a first study, taking a look at an issue that requires repetition in other populations to see whether the conclusions are generalizable or have to be modified in substantial ways in other populations.
Q. Do you have any other criticisms than the ones you just identified for me with regard to the Lancet study?
MR. LATHAM: Object to the form of the question.
THE WITNESS: I don't offer them as criticisms. I just offer them as observations. I'm not being critical of the authors. I am just observing that it's an early, highly selected study in a narrowly defined population, the conclusions of which can't be generalized. It calls for the application of similar methods in other populations to see whether they can be validated. It is not unusual in medicine to have

subsequent observations modify substantially the conclusions in an initial paper and indeed to the point that on occasion quite to the contrary results are discovered, so we wouldn't take this as, if you will, the gospel.
BY MR. JEKEL:
Q. No, but in terms of preventive medicine and getting individuals benefit, extending someone's life with lung cancer, do you think that the use of the low dose CT scan could be justified solely based on this study?
Should we not use it just because you

think that this was the first study of a highly local group of individuals where we only have a health status, are those reasons enough to not continue trying to develop the low dose CT scan in terms of screening for lung cancer?

MR. LATHAM: Object to the form of the question.

THE WITNESS: I would emphasize that in trying to investigate further the utility of the low dose CT scan for the earlier and accurate diagnosis of lung cancer, I think it ought to continue to be used specifically in other control trials in other populations. One would not make

public policy based on this study alone, not even in New York City.

BY MR. JEKEL:

Q. Nor West Virginia, I assume, correct?

A. Nor West Virginia, nor Missouri, nor Tennessee, nor the state of Washington.

MR. LATHAM: Be a good time for a break?

MR. JEKEL: Yeah.

(Recess)

MR. JEKEL: We're back on the record. Have we got everybody? I'll assume that's a yes. If they've dropped off, we don't know, but we're going to get started again.

ATTORNEY BY PHONE: Talking about those of us who are on the phone, I assume that an objection by one defendant applies to all?

MR. JEKEL: Absolutely.

ATTORNEY BY PHONE: I was pretty sure that was true, but I just wanted it on the record.

MR. JEKEL: Be good.

BY MR. JEKEL:

Q. Going back to your report, the third full sentence in the top paragraph, "Dr. Schaffner is further expected to testify regarding the

changes that histoplasmosis, tuberculosis, and other infectious disease processes can cause within the respiratory system and that radiographically these disease processes can be indistinguishable from the neoplastic disease."

I'd just like to expand upon that a little bit. First, what are the other infectious disease processes referred in that sentence? Can you identify those?

A. Well, I could identify one.

Q. Okay.

A. And that is the infection with the organism called dirofilaria immitis.

Q. And how is that contracted? Are you going to spell it out for us all? That's a good idea.

A. By mosquito.

Q. We'll give it to the court reporter.

Any other infectious disease processes that you can think of here today that would fall within that category?

A. Those are the ones that occur to me today.
Q. All right. And I'm going to refer to this one as DI, or is there a short term for this?

A. It's also called the dog heart worm.
Q. All right. We'll go with dog heart worm disease.
Have you seen any data discussing within the last ten years how many cases of dog heart worm disease in citizens of West Virginia there have been?
A. I have none.
Q. Is that a reportable disease?
A. I don't believe it is. Reportable, you mean reportable by law or Health Department regulation as an official communicable disease that must be reported to the Health Department, I assume?
Q. Either/or. Either like the CDC has a list of reportable diseases, and then each state may have a list of reportable diseases; is that correct?
A. Small distinction. The CDC can't require that diseases be reported to it. To it, that's a state function, so each state has a list of reportable diseases. I'm not aware that this is a reportable disease in that sense.
Q. In West Virginia?
A. Yes.

Q. What about here in the great State of Tennessee?
A. It is not.
Q. Okay. What are the symptoms of the dog heart worm disease?
A. In humans?
Q. In humans, yes.
A. It presents as a pulmonary nodule.
Q. Is it associated with any other symptoms?
A. Usually not.
Q. Okay. Histoplasmosis. I'm sorry, I should have done a little more research before today, but I didn't get around to it, so I don't know anything about histoplasmosis. Can you give me the five-minute lecture on the cause and the symptoms of that disease?
A. Sure. It's caused by a fungus. Histoplasmacapsulatum, which is resident in the soil in certain parts of the country, and West Virginia is within what's called the endemic area for histoplasmosis. It's transmitted to people who have close contact with the soil and sometimes even by the wind. The organism is inhaled and then can cause an acute infection, and it also has

some chronic cavitary infectious component to it, but the point that's here is that the body frequently contains the fungus, and within the

lung sets up an inflammatory reaction around the fungus, which over time coalesces and becomes harder and can present on chest X-ray as one or more pulmonary nodules.

Q. Okay. How many cases of histoplasmosis have you personally been involved in?

A. Oh, many, because Tennessee is also within the endemic area for histoplasmosis.

Q. Is there a certain age group or section group that this disease attacks or is more likely to occur in?

A. Well, the initial infection, which is often a trivial one, it may even be asymptomatic, can occur in children and young adults as they are out in the environment. It's not so much that the symptomatic cases are important here because even the asymptomatic cases, individuals, people have asymptomatic infections, can go on as the body contains this infection to later in life, sometime in their adulthood, present with chest X-rays that can have pulmonary nodules on them that will

present an element of confusion in interpretation or uncertainty in interpretation.

Q. And I just want to make sure I have this right. It's a disease that children and young adults are most affected with, but which some individuals may carry with them until adulthood asymptomatically, but it would appear as a lesion on their lung?

A. That's, yeah, that's pretty close.

Q. Okay.

A. Those children and young adults don't all get disease -- disease implies symptoms -- but they may have an asymptomatic infection, and indeed the majority of them are asymptomatic or trivial, very mild.

Q. Okay. But let's say a child, what are the symptoms, if I was symptomatic with histoplasmosis, what are those symptoms?

A. Well, it could just be a prolonged upper respiratory infection or the symptoms can be determined very much by dose of exposure. We have, for example, it's well described in the literature to have individuals, whether children or young adults, who are susceptible suddenly exposed to a large dose of histoplasma in the

environment, they can get an acute pulmonary infection, which results in high fever, chills, striking pulmonary infiltrates, profound feeling of unwell that can last for, oh, a period of a few weeks.

Q. And was that in an adult?

A. It could be in a young adult, yes, or an older adult who is susceptible, right.

Q. But let's take the situation in a younger adult, the upper -- he has the histoplasmosis, the infection goes away, is my understanding correct though that he still may

have something in his lung which later on in life may appear as a nodule?

A. That's correct.

Q. Okay. Even though he's not suffering the effects of the infection?

A. Indeed, because he's not suffering the effects of the infection, what the body has been able to do is contain the infection, and it lays down fibrous tissue or granulomatous response around it, and that very host response is what creates the nodule that you can see on the chest X-ray.

Q. Is there any other type of screening

tool, let's say a blood sample that would turn up the existence of the histoplasmosis in an individual that has this lesion on their lung?

A. The short answer is that the other tests you could do, whether a blood test or a skin test, would simply indicate prior exposure to the organism. That would be common. The question would be, what's causing this spot on the lung? It could be that, or it could be something else, particularly if the individual has other risk factors apropos with the people whom you are trying to screen here, i.e., they were long-term smokers.

Q. Just going back to the dog heart worm disease in humans, again, is there an age group or sex roup or racial group that that disease is more likely to occur in?

A. Well, that's also not a disease. In humans --

Q. I'm sorry.

A. In humans, it's an asymptomatic infection. The worm is transmitted to the human, if you will, speaking teleologically, the worm finds it's in the wrong host, shouldn't be there, it gets stuck in the lung, and at that point a

very similar enclosure phenomenon occurs. The body walls it off. You get a foreign body reaction, the worm dies, but you are left with the scar, and the scar looks like a nodule when you take a picture of it with an X-ray.

Because we do more X-rays on adults, those are the ones in whom we find occasionally nodules of unknown cause that sometimes lead to further diagnostic studies.

Q. Are there other factors -- we talked about smoking. Are there other factors that you would go down in trying to rule in or rule out a lesion being the heart worm or histoplasmosis or tuberculosis?

A. For each of those, you would have some aspects of the medical history that would be useful in somewhat increasing the odds in one way or another, or at least in forming your decision, I should say. For example, for the dog heart worm, there are endemic areas in the country, and there are areas where the dog heart worm is not a

problem to the veterinarians and to pet owners. In those parts of the country, you don't have to worry about these lesions unless the person lived in an endemic area and then moved, and we have a

pretty mobile population.

West Virginia is within the endemic area of dog heart worm. It's in the endemic area for histoplasmosis, so that would not help you distinguish what this nodule is, but you would know that the individual potentially could have been exposed to histo, and like the rest of the country, there's tuberculosis in West Virginia and more 20 years ago, according to this article in the West Virginia Medical Journal than now, so clearly a proportion of the population is going to be left with those scars.

Q. Have you attempted to design within the parameters of what the plaintiffs in this case have put forth a screening program that could take into account some of the false negative problems that the infectious disease may cause in this screening program? Have you thought of ways that we could work around it or other procedures that could be implemented that could deal with that?

A. No.

Q. Because you go on to say -- well, I'm not sure it goes on, but you have not done that?

A. I have not done that.

Q. Could you do that?

A. I would not do that.

Q. Why would you not do that?

A. Because be mindful of the fact that I am not expert here, and so I am very dependent on experts in cancer treatment and cancer longevity, et cetera, but I don't think it's been shown that the -- shown to the point that national groups, expert advisory groups recommend such screening that earlier intervention will securely prolong life, improve the quality of life or improve survival, and absent that, one would be loath to enter into a screening program.

Q. Does that have to do with the mortality rates of patients with lung cancers? Is that what we're talking about here, until science finds a better way to treat people more effectively with lung cancer, the program that the plaintiffs have proposed should not be started at all?

A. Well, that would be one of the end points. You would want to document some benefit to the individuals screened and those who are found to be truly positive.

Q. Continuing on in your expert report,

"Dr. Schaffner is also expected to testify that the" -- I'm sorry -- "medical monitoring proposals of plaintiffs' experts do not comport with

generally accepted standards of medical practice."
The first question I have for you is, what proposals of plaintiffs' experts are you referring to in the first instance? What have you reviewed to date?
A. I'm sorry?
Q. I'm sorry. It was inartfully worded. What plaintiffs' experts are you referring to in that statement? We've talked about Dr. Burns, and you have that in front of you.
A. Well, perhaps that should have been singular.
Q. I just want to -- and that's one point I need to clarify here. Is the only Medical Monitoring Program that you have reviewed contained in the report of Dr. Burns?
A. Yes.
MR. LATHAM: Object to the form of the question. Subject to that --
THE WITNESS: Yes, it is.
BY MR. JEKEL:

Q. So we could change that statement to say, Dr. Schaffner is also expected to testify that the medical monitoring proposal of Dr. David Burns contained in his revised report dated -- is that February 3rd, 2000?
A. Correct.
Q. Does not comport with generally accepted standards of medical practice?
MR. LATHAM: I'm going to object to the form of the question. Dr. Schaffner is not going to be limited by this report because Dr. Burns subsequently modified what he proposed in his deposition, and in addition, there are other experts in the case that have modified, so he's not going to be limited by this report in his opinions.
MR. JEKEL: I'd like to find out, you know, if he's going to expand or look at other reports, I want the opportunity to talk to him again about what proposals he has reviewed.
BY MR. JEKEL:
Q. Have you reviewed Dr. Burns' deposition?
A. I have not.
Q. Do you expect to do that?

A. If Mr. O'Tuel and his colleagues ask me to do so, I would do so.
Q. Just as you sit here today, the only medical monitoring proposal from the plaintiffs that you have seen and are prepared to say generally does not comport with generally accepted standards of medical practice is the one contained in the February 3rd, 2000 report of David Burns, correct?
A. That's correct.
Q. Now, what generally accepted standards of medical practice are you referring to

in that statement?
A. I was referring to the general guidelines put forward by the Preventive Services, United States Preventive Services Task Force and other bodies concerning screening in populations.
Q. Were those documents included in this stack of stuff you gave me today?
A. No. They're included in my general medical background experience and other things that I've encountered during the course of my professional life.
Q. If I were to ask you to prepare a list of those documents that identified the

generally accepted standards of medical practice for which you refer to in this statement, could you provide me a written list?
A. I wasn't thinking of it principally as this was drawn up as a specific list. It was more a product of my general background and expertise.
Q. I'm trying to find out if there is a journal, text, monograph anywhere that you will be relying upon for that statement that the Burns report, as you sit here today, does not comport with generally accepted standards of medical practice.
A. Well, as I sit here today, I can't indicate a single document that I would consider he "relied upon."
Q. Are there multiple documents that you would rely upon?
A. Well, there are multiple documents I'm sure that I have used, and I would more speak to my general expertise and background.
Q. And in the effort to save time, if I were to ask you to provide me a list of those documents, rather than ask you what one, what one, could you produce me that list?

A. Well, certainly not here today.
Q. No, no, no.
A. And I'd have to consider it, because I'm not thinking that I went through the medical library or even my own files, et cetera, and reviewed a list of -- a series of reports and documents. I'm generally familiar with a number of them.
Q. Then let's go about it this way. What exactly did you do with this report to come up with the statement that it does not comport with generally accepted standards of medical practice? What are the generally accepted standards of medical practice that you were referring to there? Can we make a list?
A. The screening, several of the proposals for screening are outside those as it is said in the next sentence that are endorsed or recommended by any major medical groups, and so the proposals, as they sit, are obviously novel, they are different from, and therefore they are

outside the accepted standards of medical practice, which do not require that kind of screening or endorse that kind of screening.

Q. Because a major medical group does or

does not endorse a certain screening program, does that mean it's not generally accepted?

And I guess the question is, does a practice need to be endorsed by a medical group before you will consider it generally accepted?

A. I would think that by and large in this era, we would expect proposals, particularly those that are comprehensive, extensive, and expensive, to be the considered recommendations of expert medical groups evaluating data from a number of sources and making sure that they comply with the standards for screening programs that were previously discussed.

Q. Those were a lot of words. I'm not sure if I understood them all.

I want -- did you do anything, did you read his report on Medical Monitoring Program, what specifically did you do to say that program is not generally accepted? Did you say, is it endorsed by a medical group, major medical group? If not, it's not generally accepted, was that the extent of what you did to come up with those statements?

MR. LATHAM: Object to the form of the question.

THE WITNESS: It clearly was not the only thing. It was not the extent of what I did. Part of what I did, as I said before, was reference that with my own general experience and background as well as my knowledge of what several of these groups have stated in the past, and I was very aware that there were a number of groups that had not endorsed this kind of screening program.

BY MR. JEKEL:

Q. Do you know Dr. Merrill?

Walter H. Merrill, surgical oncologist at the Vanderbilt University Medical Center?

A. I know a Walter Merrill who is a cardiothoracic surgeon.

Q. How about a Richard N. Pearson, III, MD?

A. He may also be a member of our surgical faculty.

Q. John R. Roberts, MD?

A. Likewise.

Q. Dr. David Parbone?

A. He's a member of our medical oncology faculty.

Q. Kenneth R. Hande, MD?

A. Ken Hande is also a member of our oncology faculty.

Q. Pabs E. Check?

A. I'm not familiar with that name.
Q. How about Hak Choy, MD?
A. I'm also not familiar with that person.
Q. Those are both radiation oncologists here at Vanderbilt. Did you at all discuss with these individuals, who Vanderbilt University advertises as those physicians who treat lung cancer, the plaintiffs' proposal contained in Dr. Burns' report?
A. I did not.
Q. Did you ask them whether they thought the screening mechanisms and those items were generally accepted or whether that was something they would endorse?
A. I did not.
Q. What medical groups, major medical groups, did you contact in an effort to determine whether they have seen the program as proposed by the plaintiffs and whether they have, in fact, endorsed it?
A. I did not contact any medical groups.

Q. What major medical groups are you referring to in there?
A. The U.S. Preventive Services Task Force.
Q. All right.
A. The National Cancer Institute, the American Cancer Society.
Q. Okay.
A. And there are a number of others with which I am not quite as specifically familiar. American College of Physicians, I believe, also.
Q. And did you go to a document of these groups or some statement that they may have put forth that you looked at to say, hey, you know, they don't endorse this screening program? How did you make the determination that the groups that you identified did not endorse a program similar to the plaintiffs'?
A. I did that.
Q. You did that? You did? Do you have these statements and item somewhere in your office, possibly, or are they in here?
A. I think the NCI statement is there. The others I think I got out of the library, but I don't remember exactly.

I don't think I have them in my office or at home.
Q. Would it be something other than, I think you're right, the NCI statement was in there. The other three, the Preventive Services, the American Cancer Society, and possibly the American College of Physicians, is that something you could give me a citation to that I could go and look at their statement?
A. Well, my recollection is that I've seen the American U.S. Preventive Service Task Force report. I don't believe I have that in my

office, although it's possible.
Q. Do you know what year that report was?
A. I don't.
Certainly not off the top of my head. I looked at the latest at the time, and this has happened within the last months.
Q. What about the others, the American Cancer Society?
A. I can't give you a specific citation.
And when I saw them, I didn't Xerox them or anything.
Q. And the American College of

Physicians?
A. Likewise.
Q. Likewise. Did you ask counsel for Phillip Morris, or I'm sorry, counsel for RJR to provide you copies of those materials?
A. They provided the NCI, and I believe I looked at the others myself.
MR. LATHAM: That he is referring to.
MR. JEKEL: Very good. Appreciate that.
BY MR. JEKEL:
Q. I think we lost somebody.
Moving on in your report, he is further expected to testify that the programs proposed by plaintiffs' experts, again, to date, that only includes Dr. Burns, correct?
A. Well, I think in discussions with counsel, it was anticipated that there would be more than one expert rather than limit, but --
Q. I'm just trying to find out what you have discussed or who you have discussed in addition to Dr. Burns today so I can ask you about it, and if it's limited to Dr. Burns today, that's fine. If it's not, let me know.
A. I believe we've only discussed Dr.

Burns to date.
Q. Thank you.
"He is further expected to testify that the programs proposed by plaintiffs' experts may put the citizens of West Virginia in serious risk of harm due to false negatives and false positives."
Now, does that statement, "The citizens of West Virginia," is that the entire population of West Virginia or that subset group of the population that would fall under plaintiffs' program?
A. The latter.
Q. The latter.
A. Principally.
Q. So citizens of West Virginia could be limited to those citizens of West Virginia that fall within the plaintiffs' definition of getting medical monitoring?
A. And those members of families, relations and friends, who in the course of

medical monitoring and the subsequent treatment, because adverse effects occurred to the person who was monitored would also suffer grief and concern and et cetera.

Q. Basically, someone thinking that they have cancer when really, in effect, all they have is the dog heart worm, correct? Is that what you are referring to there?

A. Like that.

Q. What other harm -- what other serious risk of harm are you identifying as it relates to false negatives and false positives?

A. Well, the false positive issue is one where people can be inappropriately identified in the initial screening process as having a lesion consistent with a neoplasm that then requires them with this new knowledge to have a further work-up, and that the work-up might well include an invasive procedure, and the invasive procedure may be associated with adverse events.

Q. What are the invasive procedures that you are contemplating?

A. Well, if a lesion consistent with, but not yet diagnostic of a cancer is determined, one might, as we discussed previously, undergo bronchoscopy, skinny needle aspiration, one might even be subjected to a thoracotomy in order to get tissue, and all of those procedures have hazards associated with them.

Q. I'm just -- what type of hazard do you require before it raises to the level of serious risk of harm? Is there any mathematical quotient that goes along with that? Is serious your word? Did you put that in there?

A. Serious is a word that I'm content with because I think the issues are the ones that relate to serious adverse effects. Everything from potential anesthesia-related deaths to a pneumothorax that might occur or a complicating infection in any of these more invasive diagnostic procedures.

Q. I just want to make sure that that sentence that we're talking about, the serious risk of harm that you are referring to is the invasive procedures that we've identified in addition to the general problems of a person maybe believing that they do or do not have cancer when the opposite is true?

A. Yes.

Q. So are those all of the serious risks of harm that you are dealing with here, is that the universe?

MR. LATHAM: Again, are you talking about false positives here?

MR. JEKEL: False positives or false negatives.

THE WITNESS: Well, the issue's

related to -- generically speaking, I think that is correct. You could also have concerns related to false negatives, people perhaps being complacent when they might be more concerned about the tumor that is really there, but the test reveals as negative. This is not a sentence that addresses the issue of even among the true positives what's the benefit.

BY MR. JEKEL:

Q. That's the next statement, is it not, in your report?

A. Not exactly, because it doesn't address the issue of harm, but it could be encompassed within that.

Q. Okay. Now, the last statement there, "Additionally, screening asymptomatic patients for lung cancer has not been shown to reduce mortality or morbidity, a prerequisite for an acceptable monitoring program."

My first question is, what is your current knowledge of what the mortality rate is for a person with lung cancer? And it may depend

on what stage that cancer is, and we can break it down, if that's necessary.

MR. LATHAM: Object to the form of the question.

THE WITNESS: It's outside of my area of expertise, and I rely here on the statements from authoritative bodies such as the National Cancer Institute that indicate that to date there has not been a therapeutic program that impacts favorably the mortality of people who have lung cancer.

BY MR. JEKEL:

Q. Fair enough. What statements are you relying on, and it may be, there may be a whole host of them. Again, I just want to make sure I have the universe of the materials you will rely on for the statement that you need to reduce mortality and morbidity for something to be an acceptable monitoring program.

A. I think that that goes back to the indications for design for and standards for screening programs that we would find in texts of clinical epidemiology such as I have indicated before. In other words, unless there is a benefit, why screen? And unless you can reliably

assure people that there will be a benefit, it's an intrusive thing to do.

The first admonition of the Hippocratic oath is, don't do any harm, and so you would want to make sure that you're not doing any harm.

Q. I understand. However, your expertise is not in, let's say, hypothetically speaking, that through the program that plaintiffs have designed, we could detect 50 more cancers in a Stage 1 state, lung cancers through this process, and that 80 percent of Stage 1 cancers

could be treatable, would treating the 80 percent of that number be a benefit?

A. Only if it resulted in decreased morbidity and increased longevity and an increased quality of life, and my understanding is that that goal has not yet been demonstrated.

Q. Okay. I know earlier we talked about the diseases that you opined or that you would agree cigarette smoking can cause. Were there -- and again, I'm referring to Dr. Burns' report, paragraph 7. Are there diseases, other than those listed in paragraph 7 of Dr. Burns' report that you believe as a medical doctor cigarette smoking

causes?

A. I don't believe so. I can't think of any, at least off the top of my head, but I'm not here representing myself as an expert on the relationship of cigarette smoking and consequent disease.

Q. What about on the treatment of lung cancers, Stage 1 versus Stage 2?

A. Certainly not.

Q. That may eliminate some of these questions.

Doctor, do you have an opinion as to whether a person who has a history of smoking cigarettes is at a significant increased risk of contracting serious latent disease above a person who does not have a history of smoking cigarettes?

A. I'm not sure -- I don't know what you mean by latent disease.

Q. Something that may take a period of time to discover. I smoked for five years, smoked for ten years, that the last day of that tenth year I looked good on my lungs. Five years later I have some spots on my lungs. That's what I am referring to as latent, may take a while to develop after the process or the activity stops,

smoking.

A. In light of that helpful explanation, could you rephrase the question?

Q. I'm not sure I can.

Do you have an opinion, Doctor, if a person who has a history of smoking cigarettes is at a significantly increased risk of contracting a disease that may not be discovered for some time after that person may stop smoking, as opposed to a person who has never smoked?

A. I must admit, I'm still a little confused by the question, and the issue aside of dose and duration of cigarette smoking, let's just deal with it in a vague, general way. I think you're asking me whether I agree that someone who has smoked some dose and duration of cigarettes sufficient to put them at risk, disease X, can discontinue smoking, be at that point free of disease X, but develop disease X years later.

Q. Yes.

A. If that's your question, my general

knowledge is, it depends on the disease, but clearly the answer is yes.

Q. Now, on the question of dose duration, is that an area, as it relates to

cigarette smoking and disease that you feel you have expertise in?

A. I explicitly do not.

Q. All right. So you cannot tell me how many cigarettes a day for how long a period of time a person must smoke before they are at an increased risk or at which no risk of developing lung cancer exists?

A. Correct.

Q. Okay. Do you have any expertise as it relates to the incidence of lung cancer and at what age or sex that begins to climb?

A. I do not.

Q. Dr. Schaffner, does any of your -- would your expertise allow you to separate out from smoking and other environmental factors the incidence of lung cancer and when it begins to climb?

A. It does not.

Q. All right. Do you have an opinion as to whether cigarette smoking is addictive?

A. I do not.

Q. Do you have an opinion as to whether nicotine is addictive?

A. I do not.

Q. Have you ever been a smoker?

A. Yes.

Q. For how long and of how many packs?

A. No packs. I smoked a pipe for about 20 years, usually in the evenings, and an occasional cigar.

Q. And you don't smoke the cigar anymore?

A. I don't smoke the cigar anymore or the pipe.

Q. When you're evaluating and treating patients, what other risk factors in that particular patient do you consider?

I guess, to put it the other way, when you are evaluating a patient, do you look at other risk factors that patient may have? The patient presents with an infectious disease, patient has a history of cigarette smoking, is that something you'll take into account?

MR. LATHAM: Object to the form of the question.

THE WITNESS: Well, you try to take a comprehensive medical history, and you ascertain as much information as you can about the patient. When you are a generalist, this is very elaborate.

When you are performing infectious diseases consultation, it can be very focused, and so it depends on the circumstance, if we're working with

a trauma surgeon who has got an acute abdominal problem, the larger medical history of the patient is of less immediate moment than in other circumstances, but generically speaking, you would like to know as much about the patient as possible in order to help you care for the patient appropriately.
BY MR. JEKEL:
Q. The patient presents to you with abdominal infection, the patient also presents with a serious history of cigarette smoking and maybe some other symptoms, just general shortness of breath, when you are developing a plan or treatment for that particular patient, do you consider that smoking history in the treatment you will give a patient?
A. You may. You might well.
Q. If this was the first time that patient had been to the Vanderbilt facility here, would you order a chest X-ray on that patient?
A. Now, you are speaking to me in my context as an infectious diseases consultant?

Q. Yes.
A. And so the primary care physician would already have made a determination about whether for that physician's reasons a chest X-ray would be appropriate. If we see the patient for the abdominal infection, that I believe you suggested, and the patient has symptoms that are also referable to the chest, a cough or something abdominal on physical examination, and there was not a recent chest X-ray, certainly in that context we would suggest that a chest X-ray be performed.
Q. Can I assume that you have not reviewed any of Christa Blankenship's or Maya Sebo's medical records?
A. You may so assume.
Q. So as you sit here today, you cannot tell me whether Ms. Blankenship and Sebo are at an increased risk of developing lung cancer?
A. I cannot.
Q. I did note in the copy of the Third Amended Complaint that is in your stack, throughout there is some handwriting that appears in the margins, and maybe I can find some, I just wanted to find out, is that your handwriting?

A. That's not my handwriting.
Q. Do you know whose handwriting it is?
A. I don't.
Q. Do you attach any significance to the handwriting that appears in that document?
A. No.
Q. Again, the copy of this document, was that provided to you for counsel for RJR?
A. Yes, it was.
Q. Have you asked them whether this was their handwriting?
A. I didn't pay any attention to the

handwriting.
Q. Okay. Doctor, are you aware that in this case the Court will actually determine the extent of the -- or the parameters of any Medical Monitoring Program put into place?
A. That's come up in the discussions. I think that's been suggested to me. That's what's being asked of the Court, as I understand it, by the plaintiffs.
Q. Do you think that's reasonable? Unreasonable?
MR. LATHAM: Object to the form of the question. Calls for legal conclusion.

THE WITNESS: With respect to the Court, I think it is preferable that expert medical advisory committees appropriately constituted look at good, solid data from a number of sources and provide the kind of advice and guidance that such expert advisory groups do to all aspects of medical practice, and yes, if asked, I think that's a preferable way to go than to ask a Court to do that.
BY MR. JEKEL:
Q. Earlier I talked about the screening programs that you have been involved in. Have any of those risen to a level of what you would call medical monitoring?
A. Oh, now you will have to define for me the distinction, because I asked that before, and you wanted me to include screening.
Q. Screening may just be one part of it. I'm getting more to the treatment aspect of it, and do you have in your mind a definition of medical monitoring that you used when you reviewed these materials?
A. My notion was that these materials rather defined medical monitoring for me, that they were a screening program, a proposed

screening program that had treatment, obvious treatment implications, even though the specific treatment was not specified. I thought that was a reasonable assumption, else why screen to find people who are positive?
The answer to your question is that all of the screening programs that I have been involved in had defined results about what implications for what one did with positive results, individuals who are found to be positive. Sometimes in the context of the Infection Control Program, it might just mean instituting the appropriate infection isolation precautions.
Q. Earlier we talked about, I think this was one of the materials you referred to, the U.S. Preventive Service Task Force report. Is that, in fact, the document?
A. Well, this is kind of my memory of the document. Actually, this looks like maybe a larger version than the one I saw.
Q. I may have some.

A. But I can't -- yeah, it looks similar.
Q. And this was a document that you were relying on?

A. I think so.
Yeah.
Q. Well, if you're not, now is the time to say it.
A. Well, I didn't -- that looks like a copy of the document, I think. I can't remember if that's the same size or whether it's been enlarged a little bit. My memory is a little murky about that.
Q. I just have a small excerpt here, and I want to direct you to a certain --
A. I do think mine was a smaller. It's not the 8-and-a-half by 11 format. I think the book I held in my hand was somewhat smaller than that.
Q. Part 2 under Mythology.
A. Mythology?
Q. Methodology, I'm sorry. It's been a long day for me, too. You don't know what time I had to get up to be here this morning.
A. You're nice to tolerate my teasing.
Q. You're nice to tolerate my questions.
A. I'm sorry.
Q. I just want to make sure that this is part of a document that you relied upon, and if

you will indulge me, I'm going to ask you if you agree with the statement that I have highlighted there.
"The second criterion for selecting preventative" --
A. Excuse me for a moment. May I just take a moment?
Q. Go right ahead.
A. I think I'm ready.
Q. Doctor, referring to the highlighted paragraph in the section on Methodology, the authors note, do they not, that "The second criterion for selecting preventative services for review was that the maneuver had to be performed in the clinical setting. Only those preventive services that would be carried out by clinicians in the context of routine healthcare were examined. Findings should not be extrapolated to preventive interventions performed in other settings. Screen tests are evaluated in terms of their effectiveness when performed during the clinical encounter, i.e. (case finding) screening tests performed solely at schools, work sites, health fairs, and other community locations are generally outside the scope of this report. Also,

preventive interventions implemented outside the clinical setting (e.g., health and safety legislation, mandatory screening, community health

promotion) are not specifically evaluated, although clinicians can play an important role in promoting such programs and encouraging the participation of their patients. References to those types of interventions are made occasionally in sections of this book."

Did I read that correctly?

A. You did.

Q. The first sentence in there, that the screening had to be performed by clinicians in the clinical setting, is it your understanding that the program proposed by the plaintiffs includes screening that would happen in a clinical setting?

A. I don't think it's specified that it need be performed in a clinical setting.

Q. And do you have, based on what the authors in this book concluded, an opinion as to whether it should or should not be performed in that setting?

A. I have the opinion that the sentence beginning "Findings should not be extrapolated to preventive interventions performed in other

settings" could have been further elaborated by the authors because I think this is their intention such that the sentence would read: Findings should not be extrapolated to preventive interventions performed in other settings because in those settings the screening tests are likely to be less effective.

Q. But the conclusions of the authors in this report were limited to only those screenings performed in the clinical setting?

A. Surely, but the important notation is that if you are thinking of performing screening in a larger, less selected population than the population that occurs among self-selected individuals who present themselves to the physician, that is, the clinical setting, there the -- in the larger, less selected population, the results are going to be even more problematic for any screening test than in the clinical setting. The ratio of false positives to true positives will be larger in the less selected population.

Q. Knowing what you know about Dr. Burns' proposed plan, are there aspects of his plan that could be done outside of a clinical

setting?

A. Addressing the plan that is the plan that I have seen, the one that's called the Revised Report, the limitation on where the various tests could be performed is entirely a pragmatic one. It relates to physical facilities, and the sufficiency of creating an appropriate environment where that can be done appropriately, and that the tests can be interpreted skillfully.

Q. Earlier, and I believe you were discussing the plaintiff's proposed plan at this time, you said that the -- and I'm hoping I'm

paraphrasing correctly, the plaintiffs' plan was comprehensive, extensive, and expensive. Does that ring a bell at all?

A. Sounds like something I might have said. It's been a long time, and it is all those things.

Q. What cost information have you reviewed for purposes of the plan that's enclosed in Dr. Burns' report? Have you reviewed anything specifically?

A. No. I haven't.

Q. If it was cheaper to perform some of these aspects outside of a clinical setting, how

would that factor into your opinion on the plan? Would you give up the expense for the less or the more likely to have false positives or false negatives outside of the clinical setting just to make it least expensive? Do you follow what I'm saying?

A. Your question took an unexpected turn right at the end.

Q. Let me rephrase it.

If it would make the plan, overall cost plan of the plaintiffs' program less expensive to perform some of the services or some of the screening tasks that are promulgated in here outside of the clinical setting, would you be in favor of that solely to bring the cost of the plan down knowing that doing that would increase the likelihood of the inherent problems you had doing screening outside of a clinical context?

A. Yeah, I'm afraid I have been misunderstood.

The inefficiencies, we might call them that, of performing a screening program, any screening program at all in a less selected population relates not to the physical environment in which the test is performed, but rather that

the test, which has certain sensitivities and specificities is now being applied to a population, as an unselected population, in which the true occurrence of disease is lower, and when that happens, the performance characteristics of the test are affected adversely. The less you select the population that you are applying the test to, the higher the ratio of false positives to true positives, you get more noise than you get action, and then you have to deal with all the noise.

As to the question of expense, which is not a question I have addressed in any expert fashion, clearly a characteristic of any screening program is to do it in as efficient and cost effective fashion as possible, but that even though you make the testing more cost effective does not mean that the results get any better.

Q. No, I think we were -- do you see a lot of patients with breast cancer here at Vanderbilt?

A. Even in my consultative practice, that disease does not occur very often, so there again I think you meant when you said you, you mean me personally.

Q. You personally, yes.

A. Yeah, we have a big breast cancer diagnosis treatment center here, but that turns out not to be a source of many infectious disease consultations, which means that they are doing things right.

Q. Do you know what criteria for screening of breast cancer they use here at Vanderbilt?

A. I don't.

Q. Do you know what the generally accepted principles by the major medical associations are for screening of breast cancer in the United States?

A. I don't. I'm not expert in that area.

Q. Okay. Do you have an opinion as to whether women over 40 years or 50 years old should be evaluated by their physicians prior to having a mammogram performed?

A. I have no opinion on that.

MR. LATHAM: Object to the form of the question. Go ahead.

THE WITNESS: I haven't got any opinion on that.

BY MR. JEKEL:

Q. All right. I know you've done some work with tuberculosis, so I'm hoping you'll have some information on this. What about current screening parameters for tuberculosis among school teachers? Are you familiar with any of that?

A. I know there's been some recent discussion about that.

Q. And what has the recent discussion centered around?

A. Well, the principal issue, as I understand it, has been the traditional one of identifying teachers such that they will not transmit tuberculosis to pupils and to colleagues at work.

Q. Would the same be true of healthcare professionals?

A. The notions are entirely similar except in the healthcare professional, we have a dual concern, which is because they are at increased risk of acquiring tuberculosis, we have a TB control program that is designed to also detect early disease in them, disease that they may have acquired, if you will, on the job.

Q. And do you have an opinion whether a

school teacher or healthcare professional should be examined by their physician prior to having them undergo the screening process for TB?

A. No. I don't have an opinion about that. I'm not familiar with the various proposals or current procedures in those areas in different school districts.
Q. What are the current screening techniques for TB?
A. They have profound limitations. One would be the -- one that's widely used obviously is the tuberculin skin test. That detects past exposure to the organism that causes TB, but doesn't say anything about the current disease status, so those who have a positive skin test, if what you are interested in is determining what their current disease status is require a clinical evaluation that includes a chest X-ray.
Q. And which of the screen mechanisms do you find as it relates to TB most likely to give you a true result?
MR. LATHAM: Object to the form of the question.
THE WITNESS: Yeah, I'm not entirely sure what you mean by "a true result."

BY MR. JEKEL:
Q. If we're looking for whether the person is currently suffering from TB or currently can be a carrier, expose other people in a hospital, is there one screening mechanism that you believe is more likely to give you that information?
A. Permit me to answer the question this way. It's frequently -- it is most commonly a two-step process in which you would first use tuberculin skin testing, and to define a group that has a positive test, it then would be examined and given a chest X-ray. On rare, in certain defined circumstances, where that process was thought not to be appropriate to the population, for example, in large prison systems, some prison systems have gone to rapid, small format chest X-ray screening.
Q. And to do those two steps -- I'm a school teacher. I just get hired into the school district. They want to do these two tests on me. Do you think it's appropriate for the school district to do those tests, or is me as the new teacher, should I go to my physician and have him recommend that, yeah, you should have the test

done before those are performed?
A. Well, I don't know if I have an opinion on this. In the former example, it would be a condition for employment.
Q. You don't have a choice?
A. There isn't any choice involved, is there?
Q. Do you know if they screen for TB among the faculty and staff at Vanderbilt University?
A. Yeah, we have a tuberculosis screening control program that includes for those

of us with patient care tuberculin skin test.
Q. And do you give the individual the option of getting an opinion from their physician before they undergo the skin test, or is it a condition of their employment?
A. That's a condition of their continuing to work and to have privileges here.
Q. And have you ever had a situation where there's been a false positive?
A. Sure.
Q. Did you think that false positive inflicted serious risk of harm to that individual?
A. The false positive test, the test

that subsequently was found to be false positive or that we thought was a false positive test usually does not in and of itself inflict anything more than a period of concern and consternation on the part of the individual and perhaps some on the part of the institution because we would be concerned that they might have acquired the infection on the job, but this is quite different than starting with some roentgenographic screening process where you identify things that look like pulmonary nodules. That's a very different kind of --
Q. Now, earlier we talked about -- I'm going to refer to your expert report again, and reviewing specifically the plaintiffs' proposed Medical Monitoring Program, and I wanted to ask you whether you used any kind of decision making model in coming up with the statements about it not being generally accepted and it causing serious harm. Did you follow a decision making model, a decision tree, if you will?
A. I did not.
Q. You did not?
MR. LATHAM: Just for the record, he's referring to the expert disclosure, Exhibit

1.
MR. JEKEL: I'm sorry. Yes.
MR. LATHAM: That's fine.
BY MR. JEKEL:
Q. I'm just going to hand you a portion of a document by Dr. Eddy. It's called "Common Screening Tests," and before we go through it, I'll ask you a couple of simple questions. Have you ever seen that document before?
A. I have not seen this document.
Q. As you sit here today, are you in a position to agree or disagree with statements contained therein?
A. Surely not.
My familiarity, my general familiarity with Dr. Eddy notwithstanding.
Q. Do you know Dr. Eddy?
A. I don't personally, but he's -- it's a name that's familiar to me.
Q. And is it familiar in the field of designing a screening test similar to what we have

been talking about here this afternoon?
A. Well, this is an area in which Dr. Eddy at least used to write fairly extensively, and he was considered an authority. I think he's

kind of semi-retired now.
Q. But you don't have any opinion as to whether this text is still authoritative as it relates to screening?
A. I haven't seen this text.
Q. Would you agree that evidence directly connecting the application of a screening test with the occurrence of a health outcome would be rare?
A. I'm sorry.
Q. It's my shorthand. Talking about connecting a screening test with a health outcome, chest X-ray, lung cancer, do you follow me there?
A. I --
Q. Screening?
A. I wouldn't usually define the detection of lung cancer as the health outcome; that's the detection of the disease.
Q. Okay.
A. The health outcome would be improved survival, reduced mortality.
Q. Very well. That's fine, too.
Do you think, using those two examples, the extending the benefit, the life, do you think that it's rare that you find the

screening directly linked to the outcome?
A. Certainly not in infectious diseases in the ones that I have been involved with.
Q. In what cases have you seen direct correlation with the screening mechanism and the outcome or the benefit?
A. Well, as I said, we've defined the outcomes that we desired in a very specific way so that when we instituted the screening program, for example, we were able to define those people in the intensive care unit that were colonized with that resistant bacteria, we were able then as a consequence to isolate those patients more securely, and in due course we saw a reduction in that intensive care unit of the occurrence of transmission of that bacteria. That was the result. It's very tight.
Q. Right. But doesn't that also suffer the same problem that you talked about with the Lancet study, that it's only a very local population?
A. Surely. But the principles of working in an intensive care unit in that kind of circumstance have been demonstrated repeatedly by a number of different investigators in a number of

different settings so that the CDC and other expert advisory groups suggest that as a method that's tried and true, it has stood the test of

experience in a number of different settings, it's been confirmed, and you may well try that in your own setting with the expectation of success.

Q. When you design these screening programs, were you looking at comparing the test benefits, harms, and costs?

A. Always.

Q. Is that an element of every -- in any type of screening program that you've got, before you implement a screening program, you've got to look at the benefits, the harms, and the costs?

A. In a summary way, you would like to look at the benefits, potential benefits, potential harms, and the costs that are going to be accrued, that's correct.

Q. And who makes that determination as to whether -- I mean, wouldn't you agree that it should be the patient who makes that call as to whether the test benefits, harms, and costs really make a difference?

A. I think the patient and their physician, obviously, discuss all aspects of their

care, and I do so in the context of individual patient care, but the question of whether to institute a screening program as opposed to the case finding that you were talking about in the Preventive Services Task Force, this in large program, in large populations, I think that that transcends the issues of individual doctor/patient relationships, and that's exactly where you need expert advisory groups evaluating the best possible data providing guidelines about how to proceed or whether or not to proceed at all.

Q. In evaluating the plaintiffs' proposed program, did you endeavor to talk to lung cancer patients and physicians who treat those lung cancer patients to determine what their opinions on that subject were?

A. No. I did not.

Q. Can you, given the information you have on the number of tuberculosis cases in West Virginia and the endemic histoplasmosis and dog heart worm disease, can you come up with a formula to tell me exactly how many false positives or false negatives the plaintiffs' proposed monitoring program will turn up?

A. I cannot.

Q. Do you know of anybody who can do that based on -- there's obviously data on the instances of histoplasmosis in West Virginia, right?

A. It would be a very difficult task, and there are people who are skilled in such medical monitoring, but you can't solve the medical model if you don't have certain critical data, and the proportion of individuals of whatever age and background in West Virginia that have lung nodules identified by the various screening modalities is, I believe, currently

unknown, and I think it would be difficult to extrapolate from other data to that specific population.

Q. What information do you have specifically about the group of people in West Virginia that may fall under this program and what their background would be? Do you know how many people we're talking about?

A. There may have been estimates in Dr. Burns' deposition, but excuse me, report, revised report. It is late in the day.

But the aspect that I bring to this discussion is that I know that West Virginia is in

the endemic area for histoplasmosis and for the dog heart worm and has had in the past high rates of tuberculosis, so that one can expect some false positives, the extent to which remains unknown, but it will be final. It will be real.

Q. Of those three -- histoplasmosis, tuberculosis, and the dog heart worm -- are there generally trends as it relates to West Virginia, whether the incidence of that infection is increasing, decreasing, remaining constant?

A. Some slight data, but recall that these are all infections that can be acquired very frequently without symptoms and then kind of like a long fuse, only present as a pulmonary nodule many years later. Having said that, I believe there are no data on the dog heart worm or histoplasmosis, but new infections, new clinical infections with tuberculosis seem to be declining in West Virginia in concert with their tuberculosis control program.

Q. Is that --

A. Remember, it's the infections, however, that occurred 20 and 30 years ago that we are going to run into trouble with today, so it's noteworthy and to be applauded that there are new

cases of tuberculosis are falling, but they will have a lesser impact on this particular issue.

Q. I understand. As an admitting physician at Vanderbilt, are there any circumstances under which you would recommend a chest X-ray to an asymptomatic smoker?

MR. LATHAM: Object to the form. Asymptomatic for lung cancer?

MR. JEKEL: Yes.

THE WITNESS: I was about to say that you don't get admitted to Vanderbilt if you are asymptomatic unless you are a candidate for surgery, and then, even then today if you are asymptomatic, it is no longer routine to do a chest X-ray, so there would have to be another specific indication, and, of course, I don't admit those patients, so if the you was directed at me --

BY MR. JEKEL:

Q. I was talking about you as an admitting physician in your capacity as a doctor

of infectious disease when you have admitting privileges, and you see somebody who may have the infectious disease, they are a smoker, they are asymptomatic of cigarette smoke or of lung cancer,

is there ever a situation in which you would tell that person to get a chest X-ray here?

A. With, if I may conclude the thought, your thought, with the intention of possibly finding an early lung cancer?

Q. Yes.

A. No.

Q. And the policy of not requiring the chest X-ray at Vanderbilt, is that written down somewhere?

A. It's not a policy. It has become more the standard of care that in the absence of specific indication, chest X-rays are not productive, they're not useful, and so we are doing many fewer so-called routine chest X-rays than we did when I was in training where it was absolutely routine, everybody who was admitted to the hospital got a chest X-ray.

Q. What about items other than chest X-rays? Have you moved to something else?

A. Oh, sure.

Q. Instead of the X-ray, are you using more CT scans?

A. Oh, I beg your pardon. I was going to say that routine laboratory evaluations that

once were common, that is, they were routine, now are being done on specific indication in many cases, also, as a consequence of carefully looking at the data.

Now that I have answered my question, tell me yours again.

Q. I think you've given me the information I've requested, albeit I may not have artfully asked for it.

I know I asked you this earlier. I just want to -- have you personally, and maybe it's the opposite situation. Have you personally, a person comes in, you looked at their lungs, you see something, you said, you know, based on this individual's history, I think there's a lung cancer, a benign lesion on the lung or a malignant lesion on the lung wherein later on we find out it was a benign lesion or a calcified lesion. Have you personally had that situation?

A. Yes. Surely.

Q. And approximately how many times has that happened to you?

A. Oh, golly. Again, this is in the context of consultative practice. I can only say that over the years it has happened on occasion.

I'm not a stranger to that sequence. It's not frequent, but we've seen them.

Q. Is it your opinion that in those

instances where that happened and you were consulting that you inflicted serious harm on the individual?

A. Well, you must recall, those are circumstances in which a patient was already in the institution being evaluated for more likely than not a lung problem, so the diagnosis of that patient's problem was already the agenda.

Q. So that the fact that you may have called it a malignant lesion as opposed to benign or something else, it didn't make a difference in that case, and it didn't cause serious harm because the person was there to figure out what was wrong with their lungs anyway?

A. Yes.

Q. Do you have any information on how many lung cancers diagnosed within the United States last year were operable?

A. I do not.

Q. In those cases that we talked about where you consulted and you thought it was a lung cancer or a malignant lesion or nodule, and it

turned out not to be, do you recall what evidence you had in front of you at this time? Was it just chest X-rays, or did it include CT scans, and ever a PET scan?

A. I couldn't reconstruct that right here as we sit.

Q. Do you recall an instance at least with a CT scan where you made the call with that data in front of you and then later turned out to be wrong?

A. I couldn't recall a specific patient right at the moment.

Q. You're not putting forth -- you're not an expert on the treatment of lung cancer, are you?

A. I am not.

Q. A couple of things in here I need to -- I saw some stuff in your pile here that I want to figure out. For what and how will you rely on the article I've just handed you, and for the record, it's the Patts article, "Correlation of Tumor Size and Survival in Patients with Stage 1 A," it goes on?

A. Reliance is a strong word, but it certainly provided some of the background and

reaffirmed the current statements by the NCI and others that we haven't significantly improved survival in lung cancer and reinforces the notion that even small detection of early nodules may not, as the authors say, significantly improve lung cancer mortality.

Q. Do you know what types of lung cancer, cell types were examined in the Patts article?

A. When I originally read the Patts article, I noted that, but I couldn't tell you now.

Q. Do you consider the subject matter of this article to fall within your area of medical expertise?
A. It does not.
Q. Other than what you -- do you know if it's a retrospective or prospective study?
A. I don't anymore.
Q. You'd have to read it again to know?
A. Right. But this was part of my general background reading. It's not central to what I thought I was bringing to the table today.
Q. This is one of the articles the lawyers for RJR gave you, isn't it?

A. Correct.
Q. I'm going to hand you a document, it's an article by Dr. Strauss, "Screening for Lung Cancer: Another Look, a Different View" from the March, 1997 publication Chest. I just want to ask you if you've ever seen it?
A. I have not.
Q. Are you prepared to discuss any of Dr. Strauss' conclusions today?
A. I am not.
Q. Are you familiar with the Mayo Lung Project?
A. Only in a very general way.
Q. Do you consider the studies that were performed in -- that comprised the Mayo Lung Project an area that you are an expert in?
A. I'm not an expert in that area.
Q. I handed you, this is from your stack, Dr. Schaffner, again, it's an article that deals with the Mayo Lung Project, and if you would, can you tell me for what or why you've got this document and exactly what portion of your expected testimony that forms the basis of?
A. Well, I think the attorneys sent me the article in part at my request to give me some

more just general background information on some of the very important issues that are part of this trial. I'm speaking to a small, if you will, slice of the pie of the whole area, but I'd like -- I wanted to know a bit more about this.
This reinforces the fact that I'm not an expert in this area, and this is not an aspect of the deliberations that I will be commenting on.
Q. I just want to make sure that when this thing goes to trial you don't sit up on the witness stand and say, you know, that Mayo Lung Project, that told us A, B, C and D, and that is the gospel. Do you anticipate that?
A. That seems -- no, no, no. I don't anticipate that, no.
Q. Are you familiar with the Memorial Sloan Kettering Lung Project, the Johns Hopkins Lung Project, and the Czechoslovakian study?
A. No. None of those.
Q. None of those?
Dr. Schaffner, you've never conducted

a single study related to the effectiveness of screening for lung cancer, have you?

A. I have not.

Q. Do you agree that 40 percent of lung

cancers can be detected on an X-ray in Stage 1 of the disease?

A. I have no opinion on it.

Q. Do you have an opinion or do you agree that 70 to 80 percent of resected Stage 1 lung cancers result in long-term survival?

A. I have no opinion on it.

Q. I would like to talk to you about, do you do any screening for chronic obstructive pulmonary disease in your practice?

A. No.

But that's because of the nature of my practice rather than any -- that's not a response that's substantive to the question.

Q. You don't, your area of practice doesn't see a lot of that?

A. Well, we see infectious diseases as they complicate patients who have that disease, but I'm not a pulmonologist, and our environment people who have principally their main problem is chronic obstructive disease would be taken care of by either general internists or pulmonologists.

Q. Would you refer to those experts to discuss appropriate screening mechanisms for chronic obstructive pulmonary disease?

A. Appropriately qualified experts in that area, certainly.

Q. And do you consider yourself one of those individuals?

A. I do not.

Q. Do you consider yourself an expert in heart disease such that you can discuss the various modalities for screening for heart disease?

A. No.

Q. Does any part of your practice utilize exercise stress tests?

A. No.

Q. I want to go back. A few times during the break, I just want to ask you, did you discuss the substance of your testimony with counsel at any of the breaks?

A. Absolutely not. I was so instructed before this began.

Q. Okay. They did a good job then.

What did you do -- obviously, you indicated that either last night or over the weekend you went through this stack of documents that we identified for the record. What else did you do in preparation for this deposition today?

A. Over this weekend?

Q. No. In addition to all of that.

A. I'm not sure what you are getting at.

Q. All right. You reviewed all of the materials?
A. Since we began here? Or how do you mean?
Q. No, no, no. I wanted to make sure that -- well, let's see. You reviewed your report, right?
A. When?
Q. In preparation, at any time in preparation for our meeting here today, me asking you the questions, or maybe not me, but somebody asking you the questions, you had to do something to get ready, I presume?
A. Indeed.
Q. And I'm assuming somebody contacted your office and said, hey, Dr. Schaffner, you're going to be interrogated on the 28th. Are you going to be ready?
A. That's correct.
Q. Did the lawyers or did anybody instruct you what you should do to prepare for the deposition?

A. Not in any specific way, but I had discussions with the attorneys, and I reviewed the materials.
Q. Was it the two attorneys that are here with us today?
A. Mr. O'Tuel and Ms. Susan Crooks.
Q. When did you meet with them?
A. I met with Mr. O'Tuel -- let's see. Early last week, and with Mr. O'Tuel and Ms. Crooks late last week. I can't tell you whether it was Thursday or Friday anymore, and then both before those meetings and over the course of the weekend, this being a Monday today, for the record, I reviewed these materials yet again.
Q. At any time has Mr. O'Tuel's firm or other lawyers actually videotaped you and asked you questions while you were on the videotape and later showed it to you, and kind of said, you know, this is good, this is bad, or let you make those determinations for yourself?
A. No.
Q. Other than, did the attorneys go over questions and answers with you in preparation for the deposition?
A. Yes.

Q. Did they direct your attention to -- I know I've only talked about some of the items in the stack of paper here. Did they specifically direct your attention to various sections or portions of articles or texts and the like?
A. I don't recall them doing that, no. I think we discussed the issues, and they asked me tough questions. They pretended they were you.
Q. What were some of the questions they asked you that I didn't?
A. I think you've asked many more, all those and more.

Q. Dr. Schaffner, in general, as it relates to preventive medicine, do you think it's not a good idea to try and do something to detect lung cancer earlier?
A. I think it's a great idea to try to detect all diseases early as possible if we can do something about the outcome once we have detected the disease and we don't do so at unwarranted risk or in the societal context expense.
Q. But you would agree with me that lung cancer is by far the largest preventable disease or is a preventable disease that causes the largest number of deaths per year in the United

States?
MR. LATHAM: Object to the form of the question.
THE WITNESS: Oh, dear, I don't know if I can agree, if I have enough knowledge of all the causes of preventable mortality in my brain to be able to agree with that statement.
BY MR. JEKEL:
Q. Do you know how many deaths lung cancers account for in the United States in any given year?
A. No. I can't give you that number.
Q. Would it surprise you if it was over 140,000?
A. No.
Q. Would you agree with me that lung cancer is a preventable disease?
A. Yes. Some forms of lung cancer, yes.
Q. And, again, you don't have any information as it relates to all lung cancers, the percentage of those that are related to smoking versus other causes?
A. I don't.
MR. JEKEL: Well, I think that's all I have. I would like to at least reserve on the

record, I'm sure this would be something a judge or counsel takes up, but if Dr. Schaffner is going to issue a supplemental report based on changes in discovery and all of the limitations he had in his report that we at least be given an opportunity to discuss those supplements.
MR. LATHAM: We'll decide that at a later date.
MR. JEKEL: Well, I got it on the record.
Dr. Schaffner, thank you very much. I appreciate your cooperation.
MR. LATHAM: No questions for us.
MR. JEKEL: Anybody on the phone have any questions?
ATTORNEY ON PHONE: No.
Is the court reporter still there?
MR. JEKEL: Make requests for copies of transcripts, please.
(Whereupon, the deposition was concluded at 5:33 p.m.)

FURTHER THIS DEPONENT SAITH NOT.

SWORN to before me when taken,
August 28, 2000.

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Nancy Satoloe, Notary Public
State of Tennessee at Large

My commission expires: 10-25-03

CERTIFICATE

I, WILLIAM SCHAFFNER, MD, having read the foregoing deposition, Page 1 through Page 170, do herewith certify said testimony is a true and accurate transcript, with the following changes (if any):

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WILLIAM SCHAFFNER, MD

Notary Public
My commission expires:----------
Date of Deposition: August 28, 2000